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Jennifer. Wunsch
University of Windsor

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**Computer Mediated Communication
and International Development:**
An institutional analysis of World Bank initiatives

by

Jennifer Wunsch

A Master's thesis
Submitted to the Faculty of Graduate Studies and Research
through the Department of Communication Studies
in Partial Fulfillment of the Requirements for
the Degree of Master of Arts at the
University of Windsor

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1996

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Abstract

This is an institutional critique of the use of computer mediated communication for development by the World Bank. Literature from and about the use of information technology at the World Bank was analyzed and used to form a picture of a major development agency's policies and procedures relating to computer mediated communication in the developing world. Two elements of this picture, the issues of telecommunications privatization and competition, were enlarged in order to be scrutinized more closely. The Bank's newly established program specifically geared to information for development, *infoDev*, was also explained in some detail. Since a truly institutional and participatory definition of development could not be found in the existing literature, such a definition was developed in this paper and formed the criteria by which World Bank initiatives were judged.

Information technology has become a fact of life in today's economy. Less developed nations need to determine how to make this technology work for them to avoid being ignored or exploited by information technology. The World Bank, as a key player in international development, has the potential to greatly assist developing nations in this task if they go about it the right way. According to the definition of development used in this paper, the right way is participatory and institutional. That is, it involves the common people in a way that respects their intelligence and ability to contribute meaningfully to determining their future, and it takes account of the social, economic, and political framework in which new initiatives will be functioning and adapts itself to these realities.

The conclusions reached by this study are that the World Bank is moving in the right direction in some aspects of its programs but that it is out of touch in others. The Bank needs to release its need for control of developing nations' policies and work at providing LDC decision makers with accurate and useful information pertaining to information technology issues. More attention needs to be paid to institutional issues such as political influences and social structures, and a continued thrust towards the type of participatory development reported to be evident in the initial stages of *infoDev* needs to be encouraged and developed further. The Bank's policy towards privatization needs to be re-evaluated and revamped in the light of institutional and participatory perspectives. This study was designed to provide current information from an alternative perspective on the World Bank's use of computer mediated communication as a development tool, in the hopes that it would foster change and interest in this area among interested scholars and within the World Bank itself and that it would contribute to the limited but growing literature on this aspect of development communication.

Table of Contents

ABSTRACT	iii
1. INTRODUCTION	1
1.1 The Research Question and How It Will Be Answered	1
1.1.1 Audience for this material	2
1.2 Computer Mediated Communication and the Information Economy	3
1.2.1 Information technology not a cure-all	7
1.2.2 Importance of telecommunications	10
1.2.3 Potential for societal stratification	15
1.3 Development Agency Interest in CMC	17
1.4 Questions and Direction	20
2. DEFINING INSTITUTIONALISM	21
2.1 Introduction	21
2.2 The Theory of Institutionalism	21
2.2.1 Institutions	22
2.2.2 The theory itself	23
2.3 Founders of Institutionalism	24
2.3.1 Pierce and Pragmatism	25
2.3.2 Dewey	26

2.3.3 Veblen	27
2.3.4 Commons	28
2.4 Philosophical Foundations	29
2.4.1 Symbolic Interactionism	30
2.5 Growth of Institutionalism as an Alternative Paradigm	31
2.5.1 Thomas Kuhn's theory of paradigms	31
2.5.2 Neoclassical economics—the dominant paradigm	33
2.5.3 Institutionalism as an alternative paradigm	34
2.5.3.1 Transaction costs	36
2.6 Relevance to Communication Studies	38
2.6.1 Innis	39
2.6.2 Melody	40
2.7 Conclusion	41
3. DEFINING DEVELOPMENT—AN INSTITUTIONAL PERSPECTIVE	42
3.1 Development is...	42
3.1.1 Changing concepts of development	42
3.1.2 Why do we need a definition?	44
3.2 Development: More Than Just Economic Growth	44
3.2.1 How institutionalism contributes to the discussion	47
3.3 Development For and By Whom?	48
3.4 Institutionalists Tackle the Issue	52
3.4.1 Gunnar Myrdal	52

3.4.2 Meb Bolin	54
3.4.3 Daniel W. Bromley	59
3.4.4 Mohammad Omar Farooq	61
3.5 A New Definition	63
4. THE WORLD BANK	65
4.1 What Is It?	65
4.2 World Bank Policy	67
4.2.1 Cost of information	68
4.2.2 Participation	69
4.2.3 Objectivity	70
4.2.4 Markets	71
5. THE WORLD BANK AND THE INFORMATION ECONOMY	72
5.1 Historical Role of CMC at the World Bank Group	72
5.1.1 Reason for underdevelopment of CMC resources	72
5.1.2 Separation of information technology and telecommunications	74
5.1.2.1 World Bank and telecommunications	74
5.1.2.2 World Bank and information technology	75
5.2 Information Rich and Information Poor	76
5.3 CMC as a Development Tool	77
5.4 World Bank's View of Its Own Role in the Information Economy	78
5.4.1 Acknowledging difficulties	80

5.5 Emphasis on Appropriate Technology	80
5.5.1 Leapfrogging	82
5.6 Consideration of Societal Changes Related to CMC	83
5.6.1 Culture	86
5.7 Institutional Influence	87
5.8 Participatory Focus	88
 6. EVALUATING <i>INFODEV</i>	 91
 6.1 infoDev	 91
6.1.1 Objectives	91
6.1.2 Proposal screening	92
6.1.3 Internal quality criteria	93
6.1.4 Activity categories	94
6.1.4.1 Consensus building	95
6.1.4.2 Information infrastructure strategies	95
6.1.4.3 Telecommunications reform	96
6.1.4.4 Demonstration projects	97
6.1.5 Objectivity	97
6.1.6 Projects	99
6.1.6.1.1 Telematics for African Development	100
6.1.6.1.2 Mamelodi Community Based Information Services	100
6.1.6.1.2.1 Initial report on the project	102
 7. PRIVATIZATION & COMPETITION	 104

7.1 Privatization	104
7.1.1 U.S. influence on policy	107
7.1.2 Congruence with neoclassical model	110
7.1.3 Appropriate adoption of institutional concepts	113
7.1.4 Application of the principles of participatory development	114
7.1.5 Difference between institutional and World Bank perspectives	115
7.1.6 Contribution of a more institutional and participatory perspective	118
7.2 Competition	121
7.2.1 U.S. influence on policy	123
7.2.2 Congruence with neoclassical model	123
7.2.3 Appropriate adoption of institutional concepts	124
7.2.4 Application of the principles of participatory development	126
7.2.5 Difference between institutional and World Bank perspectives	126
7.2.6 Contribution of a more institutional and participatory perspective	127
8. CONCLUSIONS	128
8.1 Role of CMC in Development Today	129
8.2 Summary of World Bank Program Strengths and Weaknesses	130
8.3 Contribution of Institutional Analysis to this Study	132
8.4 Areas For Further Study	134
8.5 Hope For the Future	137
9. REFERENCES	138

1. Introduction

1.1 The Research Question and How It Will Be Answered

In light of the growing importance of computer mediated communication (CMC) in the global marketplace it is important to understand how this technology can most effectively be used for development purposes in the developing nations of the world. This thesis proposes to explore the potential of computer mediated communication as a development tool. In order to provide a useful analysis of this issue it is necessary to focus on one smaller segment; therefore research will be focused around the World Bank Group and its relationship with CMC as a development tool.

The World Bank has not fully taken account of institutional and participatory perspectives in designing and implementing information technology initiatives, thus many of its policies are formal ideals which are not likely to bring about the desired outcomes. By institutional perspectives, I am referring to a socio-economic school of thought that places an emphasis on how social and political factors influence the economic process. It is often defined by its differences from neoclassical economics, which is a more nomothetic oriented approach to economics. A participatory perspective is one that advocates that developing country peoples initiate or at least be meaningfully involved in domestic and international development initiatives.

Working primarily from a neoclassical foundation, the World Bank has incorporated some institutional measures into their projects, but this paper will illuminate

areas where more of an institutional perspective could be beneficial. There is no attempt made to explore all aspects of the complex neo-classical framework, but only to outline institutional criticisms of neoclassicism and suggest ways in which an institutional perspective could improve analysis. The Bank has expressed a desire to function within the paradigm of participatory development yet evidence of participatory practices is limited. This paper will suggest ways in which participatory measures could be incorporated into Bank policies and procedures.

An analysis of materials drawn from the World Bank Group (including case studies, research papers, and press releases) will be used to show their perspective on CMC, how they have used it in the past, how they are currently using it, and what other initiatives they are planning. The World Bank Group's stance toward CMC and development will then be critically analyzed from an institutionalist perspective, drawing out positive aspects of the program and suggesting ways that a more institutionally-oriented approach could increase its effectiveness. In order to conduct this institutionalist critique, the elements of an institutionalist approach to development will be sketched, drawing on the works of institutionalists and showing its affinities with more recent initiatives on the part of development scholars towards participatory development.

1.1.1 Audience for this material

An institutional analysis of current development practices will be of interest to those in the development community who are unfamiliar with this socio-economic paradigm and may provide them with a different view of the situation they face. Institutional scholars will be interested in the summary of institutionalist development

frameworks and should welcome the contribution of a coherent and participant-oriented development definition to the institutionalist literature.

How CMC is being used for development and suggestions as to how it could be used more effectively are topics of great interest to the development community and policy makers in developing nations. The growing importance of the information infrastructure in the developed world makes it imperative that developing nations evaluate and carefully implement the configurations of this infrastructure that will work best for their nations. To this end, consideration of competing frameworks of analysis should help clarify the path-dependent characteristics of their development choices.

1.2 Computer Mediated Communication and the Information Economy

The wealth of terms used to describe new communication technologies is staggering—information highway, information superhighway, telematics, electronic communication, wireless communication. However, these various terms and the technologies they represent can all be classified as computer mediated communication systems, which I will define for the purpose of this study as any system of transmitting, storing, processing, or retrieving digitized information through a switched system.

The stuff that is being transmitted through the system, information, is becoming the sustaining life force of social, political, and economic relations on a global scale.

Economist and communications scholar William Melody writes that

...perhaps the most important resource determining the economic efficiency of any economy, industry, production process, or household is information and its effective communication. The characteristics of information define

the state of knowledge that underlies all social and economic processes.

They provide the foundation upon which explanations of social reality are structured. (1987, p. 1313)

Because of the switch from analog to digital modes of transmitting information, and recent advances in digital compression, the pace of information transfer has skyrocketed, facilitating greater use of global information resources with little regard to traditional time and space constraints (Negroponte, 1995). In this emerging global village physical presence is becoming less important, while digital presence is increasing in stature. Society is becoming less labor intensive, more knowledge intensive, and the computer is at the heart of it all:

As the use of the computer spreads, more and more institutions have to reconfigure their operations to comport with the new capacities and constraints it creates. In the process, society as a whole becomes increasingly dependent on large, intricately interrelated technical systems. The whole network—a system of systems, or a megasystem—becomes the indispensable technological armature of the economy. Its continued functioning is a precondition for the reproduction of the entire social order. (Marx & Smith, 1994, xi.)

If developing nations' institutions are not “configured” to be compatible with this system they will not be able to interact effectively with it and thus will be isolated from the network.

The functioning of the economy has been irrevocably altered by the increased importance of information and the increased use of computers to mediate communication. These circumstances have transformed economic transactions from one-time exchanges of information about goods and services (in the form of price) to ongoing relationships where the good being bought and sold is somewhat secondary in value to the information generated by the transaction itself; this is a networked economy.

Cheah (1992) writes that "network transactions are characterized by connectivity, interdependence and addressivity" (p. 7). It used to be that a company gained a competitive advantage through its knowledge of production—they built a better mousetrap than anyone else. Now, knowledge of how to make the product can be spread very quickly and competitive advantage is often based instead on an intimate knowledge of consumers and their needs (e.g. Rosegger, 1991). Companies now derive competitive advantage from knowing how many mousetraps are needed, when they are needed, and what kind of cheese the mice to be trapped prefer.

Activities on the information highway lend themselves well to analysis as network activities, and not market activities. Market activities are characterized by anonymous, singular transactions of self-maximizing actors in search of the lowest price for homogenous commodities.

Networked transactions involve parties for whom the identity of the trading partner is a relevant factor for decision-making. The nature of the transaction is such that goods and services are exchanged on a recurrent basis. As a consequence, the parties involved share a common

transactional history underpinned by notions of trust, reliability and cooperation. (Cheah, 1992, pp. 8-9)

Ruggles (1992) describes network transactions as a form of enterprise asset because:

Besides research and technology, investment in these assets takes the form of incurred opportunity costs, since the establishment of ongoing and trusted relationships generally requires the firm to eschew opportunistic defections from the relationship. Gains arising from increases in the number of potential transaction partners, the effectiveness of agreements and rules of conduct, continuity of economic relationships and the trustworthiness of interaction partners can be understood as 'economies of networking.' (1992, p. 4)

These 'economies of networking' can be realized by developing information applications that will build the relationship between the enterprise and the consumer, thus decreasing transaction costs such as searching for suppliers and researching quality. As the relationship develops so will trust between the parties, a shared history will be created, and, as long as both parties are satisfied, the relationship will continue with lower transaction costs than if the relationship did not exist. The enterprise will have succeeded in differentiating itself from the competition. "An appreciation of the nature of networked transactions is necessary if the underlying technologies are to be properly deployed as agents of organizational change in a networked society" (Cheah, 1992, p. 9).

1.2.1 Information technology not a cure-all

It is impossible to predict exactly what shape the reconfiguration of society will take, but Samarajiva and Shields (1990b) believe that there is a

...strong likelihood that improved two-way communication between city and hinterland may result in the ruin of local traders in the short term, and the incorporation of hitherto relatively self-contained politicoeconomic entities into the metropolitan economy with a resultant loss of autonomy in the long term. (p. 230)

This highlights the potential of information technology to be a decentralizing force on the political, social, and economic institutional structures of a society. Conversely, Gillespie and Robins (1989) argue that “...advanced communications technologies have, because of their space-binding characteristics, an inherent centralizing bias” (p. 11). Although these changes can be negative, they can also be positive, opening up new markets, improving access to medical facilities, etc. The North-South Institute (1989) has adopted a positive outlook on the effects of information technology, stating that because

“...telecommunications are not ‘elite goods’, but an important infrastructure for all economic groups...those farthest from the prime city [stand] to gain the most benefits”(p. 6). Certainly, developing nations must approach the issue with a sense of balance, realistically assessing the potential pitfalls and benefits, and navigating a course of action that avoids negative outcomes but takes advantage of opportunities for positive change.

Sussman (1991) disagrees with using computer mediated communication as a development tool, noting that

...such scholars as Cees Hamelink (1973), Herbert Schiller (1984), and Armand Mattelart (1979) have argued [that] advanced communication technology is helping consolidate economic transnationalization, with little evidence from most Third World economies demonstrating the benefits of these linkages. (p. 62)

Again, this is a case where developing nations must configure their participation in advanced communication technologies to capitalize on the benefits and minimize the potential for information exploitation. Considering the widespread use of computer mediated communication technologies, it would be difficult and rather unrealistic for developing nations to attempt to ban their use. On the other end of the spectrum, those nations with unrealistic expectations, need to heed Melody's (1986) cautions for those touting new communication technologies as panaceas for every situation. He says that what is often

...totally overlooked in the great majority of studies...is an examination of the information and communication networks being used prior to the introduction of new technologies. Without knowing the prior information flows and communication relations, one has no base case against which to compare the new, changed relations resulting from the implementation of the new technologies. The failure to pay adequate attention to the base condition often results in a simple documentation of purported benefits of the new technology to those particular users who have benefited. (p. 62)

Careful consideration of alternatives is necessary when dealing with CMC in the developing world, both in terms of which technologies to invest in and in choosing whether to invest in technology over something else. In a world of finite resources, choosing to invest in CMC means not investing in something else:

Even if one were unquestioningly to accept the proposition that telecommunication makes a positive contribution to development as measured by GNP, that would have marginal relevance to the decision to allocate public resources to telecommunication as opposed to other things. That decision must rest on opportunity cost: Will a given amount of public funds yield greater output (in whatever terms development is measured) if invested in telecommunication rather than in rural roads, school meals, casinos, or whatever?... This question is not asked, let alone answered. (Samarajiva & Shields, 1990b, p. 234)

This question needs to be asked, but presently the resources to answer it are scarce.

Regardless of the above cautions and misgivings, computer mediated communication has reached the developing world and there is no going back now: “Proposals to spurn new information technologies in the face of their widespread adoption are academic—ahistorical and irrelevant” (Mehra, 1988, p. 64). Developing countries and those who seek to assist them must learn to use these new technologies for their benefit and mitigate the problems improper applications may cause. “The real issue confronting developing societies, therefore, is not whether or not to utilize the new technologies, but how to pick and choose to maximize the returns on their scarce resources, and how to

avoid the hazards that go hand in hand with cataclysmic changes in society” (*ibid.*). This thesis seeks to demonstrate an institutional and participatory approach to this problem in the hopes that developing nations and others may benefit from it.

1.2.2 Importance of telecommunications

Telecommunications is the backbone of CMC—switched systems utilize telecommunications technology. In North America there is much debate about whether cable or telecommunications infrastructures will form the pavement of the information highway (a metaphor which is also the subject of debate). It appears that the telecommunications industry is the larger player in this battle, but in developing countries there is no battle—they are still dealing with low levels of telephone penetration— setting out to wire vast expanses with cable is simply out of the question. A World Bank paper states that “telecommunications is both the core and infrastructure of the information economy” (World Bank G, 1994), highlighting that telecommunications is both the a key commodity of the information economy and the physical structure on which the economy operates.

Telecommunications in particular, and CMC in general, are tools that are well suited to furthering development. Brecht (1979-90) (as cited in Thomas, 1994, p. 54) identified ways in which he would like to see radio modified (away from the commercial entity it had become) in order to make it an ideal communication tool:

Radios could be the most wonderful public communication system imaginable, a gigantic system of channels...if it were capable not only of transmitting but of receiving, or making the listener not only hear but also

speak, not of isolating him but of connecting him. This means that radio would have to give up being a purveyor and organize the listener as purveyor (p. 25)

These characteristics describe the potential of telecommunications and other CMC also, if they are allowed to develop in a matter consistent with the public interest.

 Dunn (1995) notes the importance of telecommunications, writing that “with information being the strategic new resource, technologically advanced telecommunications are the threads linking organizations and people in a combination of skills and ideas across states” (p. 8). Ayish (1992) says that developing countries have begun to realize this:

 To a large extent, Third World nations have come to realize that existing imbalances in global information flows are matched by widening gaps in telecommunications resources between them and the industrialized nations of North America, Western Europe, and Japan. (p. 494)

Kumar (1994) notes,

 The term telecommunications entered the field of development communication in the early 1980s and came to include not only the broadcast media but also the telephone and related technologies such as teleconferencing, audio conferencing, and satellite communications.

 Several rural telecommunications projects were launched in Alaska, India, Indonesia, and the South Pacific, mainly with the assistance of international donor agencies. The findings of these projects seemed to indicate that

there were linkages between telephony and rural development, that

telephony was a cause rather than a consequence of development. (p. 89)

However, Kraemer, Gurbaxani, and King (1992) conducted a study which reaffirmed “the presence of a relationship between economic development and investment in computing technology. The higher the level of development the higher the level of computing expenditure in a country” (p. 154). The researchers noted that there was a relationship but they were unable to demonstrate causality.

What can be concluded from these conflicting reports on telecommunications infrastructure and development is that there is some sort of a positive relationship and a solid telecommunications infrastructure is suspected of being the cause of increased development. Accepting these findings, the next challenge is to attempt to quantify the strength of the relationship and the size of telecommunications’ impact on development apart from other variables. The North-South Institute (1990), which posits that there is a causal relationship between telecommunications and development, says that

Although research since the 1960s has shown a correlation between gross national product (GNP) and telephone density in the population, the contribution made by a telecommunications system to a nation’s economic and social development cannot be measured precisely...analyses...have reported a ‘multiplier effect’ produced on the whole economy through investment in telephone systems. As well, there is accumulating evidence that telecommunications systems can directly improve the livelihood of

individual users and communities, particularly in non-central regions and rural areas... (p. 3)

Mowlana and Wilson (1990) also believe that quantifiable evidence of telecommunication's benefits does exist, stating that "...research indicates that telecommunications contributes significantly to socio-economic development" (p. 171) and citing International Telecommunications Union case studies which "show remarkable benefits in remote and developing areas. Cost-benefit ratios were as high as 85:1 in rural Egypt and more than 200:1 in Kenya" (p.198). However, they are also careful to note that "...telecommunications alone does not guarantee economic development" (p. 171).

Investing in the telecommunications infrastructure has the potential to benefit a large spectrum of the population. These benefits are realized through "increased access to information for decision making, time, and other resource efficiencies, and reduced factor costs" (North-South Institute, 1990, p.6). The CIDA forum on knowledge and information in the development process stated:

The dissemination of knowledge must extend to the countryside, which is now completely disconnected from the modern world, by extending the telecom network to rural areas. TIC (Technologies d'Information et de Communication) have made information the most fundamental of primary materials. Economies are being radically reformed, and the outcome of political and economic struggles is essentially decided by access to information. (1994)

The World Bank (G, 1994) writes,

Telecommunications has become a strategic investment to maintain and develop competitive advantage at all levels (sic) the firm, the region, and the country. Countries and firms that lack access to modern telecommunications services can no longer effectively participate in the global economy.

Mody and Dahlman (1993) write that “telecommunications infrastructure is central to the effective use of information technology, and large investments in telecommunications have been integral to the successful strategy of information technology in East Asia.”

Furthermore,

...the spread of further banking automation in Indonesia and other developing countries, such as automatic teller machines, is being held back by unreliable telecommunications—one of the biggest impediments to the general use of information technology in developing countries. In Poland, where retail banking is also becoming computerized, telecommunications are a major constraint to further automation. (*ibid.*)

The global need for telecommunications infrastructure was recognized by the international community as far back as 1982 when the Maitland Commission

...was formed after the 1982 conference of the International Telecommunication Union (ITU) [to] give formal recognition to the “fundamental importance of communications infrastructures as an essential element in the economic and social development of all countries” (North-South Institute, 1989, p. 1).

It appears that the need for improvements in telecommunications infrastructure is a common thread among most or all developing nations, suggesting that this is an area deserving a great deal of attention from development agencies and national governments.

1.2.3 Potential for societal stratification

It would be difficult to be unaware of the growing importance of information in today's society. The World Bank reports that:

Over the past four decades, the share of information services in national and international economic activity has increased steadily. The proportion of "information" workers in the working population, even in the early 1980's, was as high as 45 percent in the United States. Other industrial countries, while behind in this, were quickly catching up. (1993)

To be left out of the information loop is to be left out of the hub of the economy.

Information is *the* resource of the future. Melody (1987) notes

Many individuals and organizations can benefit substantially from the rapid expansion of the information and communication sector, but at least some are likely to be disadvantaged, both in relative and absolute terms, especially if traditional public and social services are displaced, downgraded, or made more expensive. (p. 1335)

Due to the cost of computer technology, the lack of a stable telecommunications infrastructure in many LDC's, the low level of computer literacy (and other forms of literacy), and a stance against widespread information exchange among some developing country governments, LDC's are in great danger of being bypassed by the information

highway. Except in rare cases (such as Singapore, where the government has created such a technological society that virtually every aspect of life is subject to computer surveillance), developing nations have not realized the importance of information and information technologies. This has left the citizens of these societies at a distinct disadvantage relative to the citizens of the rest of the world. And, as Melody (1991) notes, "...the benefits of [information and communication] technologies will not be distributed uniformly across markets...the structure of markets will be affected in fundamental ways..." (p. 28). Not only do developing nations face the threat of being circumvented by the information economy, they are also likely to be the victims of information exploitation. Canada's Information Highway Advisory Council (IHAC) cautions that because "the interconnection of networks increases the flow of personal and business related information" (IHAC, 1995, p. 49) privacy is a key concern for those who use and regulate the information infrastructure.

Existing data—including electronic transactions, credit records, financial accounts, educational, medical and driving records—may be reused to develop comprehensive profiles of individuals or companies. These records can be sent across national borders and sold or integrated with other databases. Manipulation of data may occur without the consent of the individual from whom it was collected. (*ibid.*, pp. 49-50)

Those without access to information technology and/or without an awareness of the data being compiled about them are at the mercy of those who collect and control this type of information. This type of exploitation can occur on a national scale; information savvy

nations can easily gather data from nations without the resources or experience to address privacy issues. On a smaller scale, computer literate individuals and corporations within a country can and do engage in information gathering from other individuals and corporations without their permission or knowledge. Such transgressions of privacy need to be illuminated and addressed by every nation without delay.

LDC's need to develop initiatives to minimize the potential negative impacts of information technologies and ensure that their nations adapt to and benefit from the new structure of the world economy while protecting the interests of their citizens.

1.3 Development Agency Interest in CMC

The attitude of development agencies and development workers towards CMC is an accessible and useful gauge of the importance of CMC to development. A search of the literature available from several of these agencies reveals widespread interest in CMC for development although varying levels of commitment to its use were evident among the agencies.

Kumar (1994) says that,

The organizations promoting this revival [of telecommunications as a development tool] have been the International Telecommunications Union (ITU), the Organization for Economic Cooperation and Development (OECD), the World Bank, United States Agency for International Development (USAID), and The Inter-American Development Bank (IBD). The Maitland Commission Report, *The Missing Link*, has become the bible of this telecommunication approach to development.

Assumptions of this approach are that the (sic) telecommunications: (a) benefits the society and the economy; (b) improves cost-benefits of rural service delivery; (c) improves cost-benefits for rural economic activities; (d) permits more equitable distribution of economic benefits; and (e) facilitates social change and improved quality of life. (p. 89).

Canada's International Development Research Centre (IDRC) notes on its web site that it "has long recognized the need for increased support for the information infrastructure in developing countries and for more research into information problems" (IDRC, 1996). Indeed, IDRC has a variety of programs and publications dealing with information and communication for development. As evidence of this focus, Hafkin and Menou (1996) note that IDRC felt that "assessing the impact on development of information transmitted electronically" was so important that IDRC decided to sponsor a case study on this topic in conjunction with its CABECA (Capacity Building for Electronic Communication in Africa) project.

The World Bank has recently launched *infoDev*, a program designed specifically to study and stimulate the use of information for development. The *infoDev* funding application states that *infoDev* resulted

...from an awareness that revolutionary advances in information and communications technologies have two concurrent and complementary impacts on developing countries and economies in transition: first, they open up extraordinary opportunities to accelerate social and economic development; second, they create a pressing reform and investment agenda

both to capitalize on the new opportunities and to avoid the deterioration of international competitiveness. (A. Kaufman, personal communication, March 25, 1996)

In addition to its *infoDev* initiative, the World Bank has electronically published several papers exploring CMC applications in various regions, and has a rapidly developing web site that is host to a wealth of development information.

The Organization for Economic Cooperation and Development has also been exploring CMC in the context of development for some time. For the past several years they have been publishing a series of reports, *Information Computer Communications Policy*, dealing with a variety of CMC and development issues.

The Canadian International Development Agency (CIDA) has not been leading the way in exploring CMC as a development tool. However, they are beginning to recognize its importance. A group of development workers gathered together to discuss knowledge and information in the development process held an open forum in 1994 to discuss the priority that CIDA should give to information technologies. The number one recommendation was that

CIDA could help to create an 'enabling environment' within which our development partners could establish appropriate policies to deal with issues of access, distribution and content, as the 'information revolution' progresses. There is a vacuum, internationally, in this field, and Canada may be well fitted to help fill it. (1994)

1.4 Questions and Direction

Exactly how CMC can best be utilized in the development process is the question that development agencies and LDC governments are now grappling with. Who can finance CMC? Who should finance CMC? Should technology be configured to meet the needs of the country as a whole or specific groups that are most likely to use it? How do you determine which technology is most appropriate? What about privacy? Trans border data flows? How will CMC affect the balance of power? The answers to these questions are not quick and easy, and in some cases may not exist. This thesis only seeks to investigate a very specific area of CMC in the development context, that of World Bank initiatives to use computer mediated communication for development, in the hopes that by narrowing in on one development agency's efforts it will be possible to make observations detailed enough to be useful but general enough to answer some of the larger questions surrounding this issue. The following chapters will explore ways in which an institutional framework for development can contribute to effective CMC development initiatives. Such an approach allows for the balancing of the interests of developing nations, which may be inclined to view participation in the information society as anything from an irrelevant luxury to as a means of asserting their presence as a nation of the world, and the diverse interests of development agencies, information technology suppliers, and the international financial community. The participant oriented perspective advocated in this study also contributes to its usefulness, in that it, like institutionalism, stresses the unique nature of each situation and the need to allow the peoples of each nation to approach computer mediated communication on their own terms.

2. Defining Institutionalism

2.1 Introduction

Institutionalism is primarily a socio-economic school of thought which identifies the structure of social institutions as the main motivator of economic behaviour. However, what is often overlooked in the study of institutionalism, is the epistemological principles which underlie it. This chapter seeks to correct this deficiency by looking at the basic theory, the philosophical stream from which its founders emerged, the progress of the theory through these early founders, the basic philosophical foundations of the theory, its relationship to symbolic interactionism, and its development as an alternative paradigm in relation to Kuhn's theory of scientific revolutions.

In addition to being a valuable contribution to the field of economics, institutionalism has an important role in the field of communication studies. Because of its unique orientation towards information, technology, and the process of economic transactions in general, it is far better suited to application in communications than neoclassical economics with its recent makeshift attempts to classify information as a commodity, as will be illustrated by briefly highlighting some of the work of institutionalist communication scholars.

2.2 The Theory of Institutionalism

Institutional economics is most succinctly defined by its differences from neoclassical economics in that it is a

...rejection of atomistic individualism, static equilibrium, and constrained maximization...[with an] emphasis on cultural relativism, evolutionary change, and pragmatic social action... (Harvey and Katovich, 1992, p. 791)

2.2.1 *Institutions*

In order to understand institutionalism one must first understand what an institution is. North (1991) writes that :

Institutions are the humanly devised constraints that structure political, economic and social interaction. They consists of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights)...Together with the standard constraints of economics they define the choice set and therefore determine transaction and production costs and hence the profitability and feasibility of engaging in economic activity. (p. 91)

Walton Hamilton (cited in Melody, 1987) defines an institution as “...a way of thought or action of some prevalence and permanence” (p. 1315). Melody goes on to say that “institutions are created from the development of a desire to share information, thereby cultivating patterns of interaction, that is, communication or information exchange” (*ibid.*). Ramirez (1986) offers a communications perspective on institutions:

Through communication, culture is created which continually adapts ‘action repertoires’ and other survival resources and passes them on. Life continues only because of communication which creates cultures, of which language becomes the foundation. Institutions are the superstructures of

culture. They evolve from the culture through the mediation of communication processes. (p. 105)

2.2.2 *The theory itself*

Mirowski (1987) compiled a characterization of institutionalism, based on institutionalists in the period from Thorstein Veblen to John R. Commons. His basic tenets, although lengthy, are a useful aid in understanding institutionalism—they are:

- a) The economy is primarily a process of learning, negotiation, and co-ordination, and not a ratification of some pre-existent goals or end-state. Economic rationality is socially and culturally determined...The economy itself may be conceptualized as the prosecution of inquiry by material means, with the community both constructing and discovering its values.
- b) Economic actors are defined by their habits, customs, and ‘instincts’, and the physical or material relations that impinge upon them, and the expedients developed in order to adapt one to the other...
- c) There is no unique logic of choice...
- d) Because there exist no innate rules of rational economic behaviour, the only gauge of the validity of such behaviour resides in the particular economic community...The appropriate epistemological unit is the institution. Institutions are transpersonal rules that endow individual economic actors with the ability to cope with interpretations of action and with change...
- e) ...Diversity of interpretations are as important for the viability of social structures as simpler economic indices, such as profit or growth

- f) Because rule structures cannot be comprehended by external detached observation, economists must self-consciously engage in participant observation. Economics is based upon a theory of the semiotics of trade, production, and consumption, which serves to explain how actors interpret the significance of transactions...(pp. 1019-1020)

Mirowski's outline of institutionalism highlights that the economy is dynamic and socially defined, the environment impacts on economic actors, personal taste has a role in decision making processes, institutions determine economic behaviour, there is value in differing perspectives, and that economic systems can only be analyzed in the context in which they are currently existing.

Littlejohn (1992) has classified theoretical paradigms as belonging to either a *Worldview I* or *Worldview II* tradition. Institutionalism would be classified as a *Worldview II* tradition by Littlejohn, as it meets the criterion of being a theory which "relies heavily on constructivism, viewing the world in process. In this view people take an active role in creating knowledge" (p. 32). Conversely, neoclassicism is a *Worldview I* tradition, in that it "is based on empiricist and rationalist ideas. It treats reality as distinct from the human being, something that people discover outside themselves" (*ibid.*).

2.3 Founders of Institutionalism

Institutionalism spans the work of Thorstein Veblen right up to major modern economists such as John Kenneth Galbraith (Miller, 1993, p. 52). However, its roots go back to Charles S. Pierce and his philosophy of pragmatism.

2.3.1 *Pierce and Pragmatism*

Pragmatism emerged as an indigenous school of philosophy in the United States in the late nineteenth century. It has ties to several German movements of philosophy (Mirowski, 1987, p. 1007). Mirowski believes that:

...the Pragmatic conception of scientific endeavor and epistemology, which later induced a novel reinterpretation of the economy and the economic actor, was consolidated into an institutionalist school of economic theory in the first three decades of the twentieth century. (pp. 1007-1008)

He goes on to identify the motivating force behind the development of pragmatism as that of creating an alternative paradigm: "...it was the project of the pragmatists to provide a systematic alternative to the Cartesian analytical tradition, as well as to the naturalistic doctrines characteristic of positivism" (p. 1008).

Charles Sanders Peirce, besides being "...the founder of semiotics, the theory of the interpretations of signs and their interrelations" (*ibid.*, p. 1013). was also the "founder of pragmatism...[unfortunately,] he left no synoptic account of his philosophical system. In this respect...he resembles that other towering figure of twentieth century philosophy, Ludwig Wittgenstein, in that he only bequeathed to us a disorganized sheaf of disconnected, epigrammatic and oracular accounts of his mature philosophy, which had to await publication until after his death." (*ibid.*)

From the beginning, pragmatism placed an emphasis on a socially constructed reality, that is, that reality is formed by relationships between individuals and their environment. Pierce (quoted in Mirowski, 1987, p. 1009)

said that “...the very origin of the conception of reality shows that this conception essentially involves the notion of a *community*.”

The pragmatic philosophy of science has been distilled by Mirowski into several basic points which, in paraphrased form, are:

- a) Science is primarily a process of inquiry and not a mechanical legitimation procedure of some pre-existent goal or end state
- b) Possible methods of inquiry consist of deduction, induction and abduction (i.e. the process of forming an explanatory hypothesis).
- c) There is no single logic but a logic for each of deduction, induction and abduction.
- d) There are no foolproof impersonal rules of scientific method. The community of inquiry is the basic epistemological unit.
- e) Hermeneutic techniques are a necessary component of scientific inquiry.
- f) The study of semiotics and the interrelation of signs constitutes an integral part of the philosophy of science.

Paul D. Bush (1993) believes that “the dominant themes in the methodological literature of American institutionalist thought can best be understood as an application of pragmatic instrumentalist philosophy to the study of economics” (p. 59).

2.3.2 Dewey

Although Pierce founded pragmatism he was not the one who disseminated it. Instead, it was John Dewey “...through which many of the precepts of pragmatism

migrated over to American social theory in the early twentieth century” (Mirowski, 1987, p. 1014). Apparently Dewey was a much more understandable representative.

2.3.3 Veblen

Veblen is “...the acknowledged progenitor of the institutionalist school of economics”(Mirowski, 1987, p. 1002). However, “it is not clear that Veblen himself ever used the term *institutional economics*” (Klein, 1993, p. 15). Gruchy (1987) notes that Veblen defined institutionalism (actually, “evolutionary economics” was his phrase) as “a genetic account of the economic life process, a science that sets out to formulate a theory of the process of economic life” (p. 23).

Since Veblen first questioned the philosophical preconceptions of economics “...the institutionalist school [of economics] has been distinguished from the general run of orthodoxy by a concern with the philosophical aspects of economic issues, especially in its role of a critic of neoclassical economics” (Mirowski, 1987, p. 1002). Veblen’s role in this orientation could be attributed to the fact that he “came into economics with a strong background in philosophy, particularly Kant, Hume, Locke, Comte, Spencer, and the post Darwinians” (Gray, 1981, p. 102).

Veblen published his first economic article in 1892. His ideas were not received well by what Gray terms “reactionary capitalistic interests” who launched a “vicious propaganda attack” against him. “The anti-Veblen campaign plagued American universities for a quarter of a century, say from 1900-1924, and left many scars in its wake” (*ibid.*, pp. 104-105). When it was finished, all that remained was a tattered remnant of institutionalists, and Veblen was branded as either a communist or an anarchist.

Gray remarks that “Veblen’s work has split American economics into two warring camps” (*ibid.*, p. 103).

2.3.4 Commons

In 1924 John R. Commons published *The Legal Foundations of Capitalism* and tactfully revived the notion of institutionalism. He was more pragmatic than the idealistic Veblen (*ibid.*, pp. 106-107).

Like Peirce, Commons held animosity towards the Cartesian notion of a duality of mind and body. He “...suspected that doctrine had served to obscure the problem of conflicts of interest in earlier economic thought...” (Mirowski, 1987, pp. 1025-1026). He believed in the social construction of reality: “For Commons, both truth and value were defined as the consensus of the relevant investigative community. Mind was not assumed to be a passive receptacle of sense impression, contrary to neoclassical biases, but rather as an active inventor of meanings that displayed ‘an inseparable aspect of valuing, choosing and acting’” (*ibid.*, p. 1026). These beliefs were incorporated into Commons’ version of institutional economics “...by isolating value as the central epistemological term in economics and by postulating that the definition of value is tentative and evolutionary, constructed by courts in the course of their adjudication of conflicts of interest” (*ibid.*, p. 1026). Commons was saying that our knowledge of the functioning of the world of economics is based on value and value is something which is always changing, according to what the judiciary sees as being valuable at the present time (e.g. information about transactions, which used to be of little value, is now considered highly valuable and has been established as such through the legal system).

Commons (1934) christened his theory ‘Institutional Economics’, and said “...we may define an institution as Collective Action in Control of Individual Action” (p. 69, cited in Mirowski, 1987, p. 1026).

2.4 Philosophical Foundations

The differences between institutionalism and the dominant economic theory go right to their foundations. Mirowski (1987) contends that “institutionalist economics was the offspring of an entirely distinct philosophical tradition from that which gave rise to neoclassical economics” (p. 1002). He says that “schools of economic thought may...interpenetrate and cross-fertilize, but their initial integrity and specificity are because of their origins in a particular construct of our knowledge of the ‘external’ world and hence of ourselves and other actors” (p. 1005).

Institutionalism clearly accepts the theory that reality is a socially constructed entity, and that that construction occurs within a particular culture. ‘Objective facts’ are not generally accepted in institutionalism, since institutionalists would argue that these ‘facts’ are only facts in certain institutional contexts. Miller (1993) writes:

Following Dewey, institutionalism apprehends that we learn by doing—that is, experientially and experimentally—and that thought and action are essentially intertwined...There is no normal order toward which things tend. Reality is fashioned by humans, and humans are responsible for its unfolding progress—or retrogress, as the case may be. [Social] reality is always in flux and is, at all times, the culmination of the interactions of individuals acting within the setting of an inherited and continuously

evolving social and economic landscape. Individual action most frequently is effectuated by and through the groups with which individuals are affiliated...There is an ineluctable two-way flow between individuals and their culture...(p. 52).

These basic beliefs, in one way or another, shape every tenet of institutionalism.

2.4.1 Symbolic Interactionism

In a paper by John T. Harvey and Michael A Katovich (1992), which appeared in the *Journal of Economic Issues*, a strong case is made for the argument that institutionalism and symbolic interactionism have common roots. The authors note that the

...institutionalist emphasis [on cultural relativism, evolutionary change, and pragmatic social action] parallels the symbolic interactionist perspective within sociology...Spurred by the writings of G.H. Mead [1934] and his various interpreters...interactionists have also spurned atomistic images to champion a dynamic image of joint action that is as much determining of situations and their structural dynamics as being determined by them. At the center of their dynamic imagery are creative and minded selves who, as with the institutionalists, are located within a culturally relativistic and evolutionary perspective. (pp. 791-792)

Harvey and Katovich then go on to identify the philosophical tradition of pragmatism as the common core from which both institutionalism and symbolic interactionism emerged.

Mirowski (1987) notes that even before the period when Dewey was making

pragmatist thought known, there was a kinship with symbolic interactionism in its emphasis on process: “For Dewey, as for Peirce, inquiry is pre-eminently a *process* whereby doubtful or unsettled situations become settled” (p. 1015).

2.5 Growth of Institutionalism as an Alternative Paradigm

The evolution of institutionalism has followed a pattern that marks it as an excellent example of Thomas Kuhn’s theory on the development of paradigms, as laid out in his book, *The Structure of Scientific Revolutions*.

2.5.1 Thomas Kuhn’s theory of paradigms

In 1962 *The Structure of Scientific Revolutions* was published and unleashed a new way of thinking about the development of schools of thought. In this work Kuhn dismissed the notion that science was a value-neutral field that merely explored and objectively observed a knowable world. Instead, he postulated that scientists brought a set of assumptions with them, and that their work emerged from this point. Kuhn termed the worldview from which most scientists operated the dominant paradigm. He observed that over time anomalies arise in this paradigm—problems with the underlying assumptions of the paradigm that cannot be reconciled—and, after enough have accumulated, a new paradigm which is able to respond to these anomalies emerges as an alternative paradigm:

...when...a profession can no longer evade anomalies that subvert the existing tradition of scientific practice—then begin the extraordinary investigations that lead the profession at last to a new set of commitments,

a new basis for the practice of science. The extraordinary episodes in which that shift of professional commitments occurs are the ones known in this essay as scientific revolutions. (Kuhn, 1970, p. 6)

Kuhn notes that only in mature sciences do scientific revolutions occur.

New paradigms are not to be viewed as a progression forward from the old paradigm, but as a completely alternative paradigm that emerges alongside the dominant paradigm (although not in harmony with it):

The transition from a paradigm in crisis to a new one from which a new tradition of normal science can emerge is far from a cumulative process, one achieved by an articulation or extension of the old paradigm. Rather it is a reconstruction of the field from new fundamentals, a reconstruction that changed some of the field's most elementary theoretical generalizations as well as many of its paradigm methods and applications. (*ibid.*, pp. 84-85)

Miller (1991), after defining Kuhn's concept of normal science as "...science in the grip of a prevailing paradigm" asks "Is the Kuhnian concept of normal science valid for economics, and, if so, what are the implications of this for economic policy and research?" (p. 994). Miller's answer to her own query is that "normal" economics is indeed a normal science: "normal economics constructs a model of the world that admits of one conclusion only, [that the economic world is constructed of a system of supply and demand that will seek an equilibrium price,] irrespective of the problem (puzzle) posed. It is characterized precisely by the 'abandonment of critical discourse' that Kuhn apprehends as a hallmark of

normal science” (p. 995). What Miller refers to as “normal economic science” is what has been referred to elsewhere in this paper as neoclassical economics. She characterizes it as follows:

Standard economic theory joins a platonic veneration of abstract, universal, and eternal truths with a reliance upon cartesian rational thought and newtonian mechanics. *A priori* reasoning is employed logically to deduce from its model of the world truths about reality; that is, regularities and uniformities in nature that are taken as universal laws. The model is driven by first principles, absolutes, ultimate realities, truths given from outside the system...The validity of assumptions (that is, the world view) is irrelevant. (*ibid.*, p. 995)

In contrast, “institutional economics does not see truth as absolute” (*ibid.*, p. 997). Reality still exists but “...there exist...many perspectives, each with an equal claim to validity” (*ibid.*, p. 1000).

2.5.2 Neoclassical economics—the dominant paradigm

Neoclassical economics is, without a doubt, the dominant paradigm within economics. Neoclassical economics is often presented as economics; other ways of looking at society in an economic sense are not considered to be equally valid by many of those who define themselves as economists.

As has been noted, neoclassical economics looks at the world in a very different way than other perspectives. Miller (1993) writes “The deductive method [of inquiry] was the accepted method of classical and neoclassical economics, and remains the method of orthodoxy to this date. To the questions of ‘How do we learn? How do we know?’ it

answers: ‘We learn through the uncovering of a few simple truths, a small number of uniformities and regularities in nature that are amenable to a priori discovery. Once established, the logical inferences of these natural laws can be worked out and applied.’” (p. 51).

But what is the nature of neoclassical economics? Mirowski (1987) makes the point that “...there exists a close correlation between the Cartesian epistemology and the structure of neoclassical economic theory: a familial resemblance that serves to fuse the natural world and the social world into a single coherent entity for the analytic Anglo-American mind. The social order of the economic world is reflected in the scientific order of the natural world.” (p. 1007)

2.5.3 Institutionalism as an alternative paradigm

Institutionalism arose as an alternative to neoclassicism. Klein (1993) points out that “[n]o charge is leveled more consistently at institutionalism (when it is referred to at all) than that it has nothing positive to offer—it is ‘mere dissent’” (p. 13). Certainly, there is much for institutionalists to dissent with in traditional economics. In an age of information and information technology many traditional economists are still viewing information as a costless entity that is available freely to all. This results in their completely misinterpreting the current ‘information economy’. Those neoclassicals who have ventured to try and incorporate a more realistic view of information into their theoretical paradigm have tried to classify it as a commodity, but a commodity unlike any other. Problems like these are fertile evidence of ferment in a field that is ripe for revolution:

Because it demands large-scale paradigm destruction and major shifts in the problems and techniques of normal science, the emergence of new theories is generally preceded by a period of pronounced professional insecurity...Failure of existing rules is the prelude to a search for new ones. (Kuhn, 1970, pp. 67-68).

What institutionalists have been accused of “dissenting” from are the more static and statistical approaches of neoclassical economics. Having seen the anomalies in neoclassicism, such as neoclassicism’s inability to account for differences in political structures, social institutions, etc., institutionalists have attempted to piece together an alternative paradigm that adequately deals with neoclassical anomalies, and presents a framework that is more in tune with the thought processes of other social science disciplines.

This dissent goes back as far as Peirce. Mirowski (1987) writes:

The presuppositions of utilitarianism offended [Peirce’s] hermeneutic view of science in a number of ways: they denied the role of tradition in human understanding; they blithely ignored the incommensurability of valuations [i.e. that the value of one thing cannot always be compared to another]; they gave short shrift to the dependence of behavior on community interaction and semantic processes; they were incompatible with the idea of evolutionary change [i.e. that systems change and develop over time] and with abduction; and they smacked of Cartesian mechanical reduction. (p. 1014)

Mirowski goes on to quote Peirce referring to American political economy as “...an exaggeration of the beneficial effects of greed” (p. 1014).

Gruchy (1987) concurs with the analysis of institutionalism as an alternative paradigm in the Kuhnian sense. He writes: “The cultural approach of the institutionalists has led to a paradigmatic shift from the scientific paradigm of the orthodox economists, oriented to the concept of a static equilibrium, to a new scientific paradigm oriented to the concept of a dynamic process” (p. 4).

2.5.3.1 Transaction costs

One of the distinguishing features of institutional economics is its recognition that there are costs incurred in the process of buying and selling goods and services. This recognition began with Commons (1934), who defined transactions as

...the means, under operation of law and custom, of acquiring and alienating *legal* control of economic quantities, including legal control of the labor and management which will afterwards produce and deliver commodities towards the ultimate consumers. (pp. 86-87)

Commons saw the economy as a series of transactions, and built his theory around that concept, rather than the core neoclassical concept of a price (since many of the costs of transactions may not be monetized).

Over the years this understanding became the basis for the idea of transaction costs. Dahlman (1979, p. 148, cited in Coase, 1988, p. 6) describes transaction costs as “...search and information costs, bargaining and decision costs, policing and enforcement costs”

Some neoclassicals, such as Coase (1988), recognized that transaction costs were a necessary part of a coherent conception of the economy. Coase explains that

In order to carry out a market transaction it is necessary to discover who it is that one wishes to deal with, to inform people that one wishes to deal and on what terms, to conduct negotiations leading up to a bargain, to draw up the contract, to undertake the inspection needed to make sure that the terms of the contract are being observed, and so on. (p. 6).

He remarks that the concept of transaction costs is “...largely absent from current economic theory...” (*ibid.*) and this absence renders it “...impossible to understand the working of the economic system, to analyze many of its problems in a useful way, or to have a basis for determining policy” (*ibid.*). “This is, of course, a very unrealistic assumption” (*ibid.*, p. 114). Coase’s criticism of “current economic theory”, which could be interpreted to mean current neoclassical theory, is also voiced by Cheah (1992), an institutionalist, who complains

Until recent times, the conceptual role of transaction as a unit of analysis has largely been ignored by mainstream economists. This is because mainstream economics is built upon models and theories of instantaneous market exchanges of standardized goods and services between anonymous parties. The idea that economic interactions are driven by considerations of long-term relationships wherein the history and identity of transactional parties matter can be attributed to [John R. Commons]. (p. 8)

Cheah's understanding of the networked nature of the economy hinges on the notion that there is a cost to transactions which must be accounted for. This understanding of the economy as a network is largely institutional, "...the antithesis of market transactions as conceptualized by mainstream economists" (*ibid.*).

2.6 Relevance to Communication Studies

Smythe (1981) comments that institutional economists, unlike their neoclassical counterparts "...do recognize the existence of the mass media, the reality of demand management by giant corporations through advertising, market research, product and package design, but stop short of recognizing the audience commodity." He lambastes neoclassical economists for the "...‘ostrich head in the sand’ effect that their theory exhibits regarding mass communications and advertising" (p. 112)

Economic analysis provides a rich dimension to the study of communications. Institutional economics is particularly well suited to the field of communications, as it recognizes the importance of communication and information, and as it allows for a more relationship oriented analysis. Since communication is seen to be a socially structured process, at least among *Worldview II* scholars, it makes sense that attention be paid to a theoretical paradigm which places its emphasis upon the social structuring of institutions and how those institutions affect further constructions. Institutionalism is not just an economic paradigm, it is also a useful theoretical tool for many other fields in social science, including communication studies.

As has been mentioned previously, institutional economics handles the role of information in society much better than neoclassical economics. There is a central role

within the theory for technology, which Lower (1987) defines as “...the dynamic force in a process of cultural evolution...” (p. 1149). Communication scholars working within the area of development communications and economics often use institutional economics without even realizing it (Klein, 1993, p. 33).

Sussman and Lent (1991) clearly lay out the relevance of an institutionalist perspective to this thesis:

What ultimately is determinant [of the success or failure of communications technologies as an instrument of development] is not communication or other technologies per se but rather the social forces in command of the conceptualization, design, development, and applications of those technologies. Students and practitioners interested in the role of technology for socially emancipatory ends should want to emphasize the primacy of the political economic arrangements and the values embedded in technology selection and decision making. (p. 22)

2.6.1 Innis

Many prominent communications scholars make use of institutionalist theory. Harold Adams Innis is probably one of the most famous to have worked within an institutionalist paradigm. In line with Veblen, “Innis argued that in any society the media of communication greatly influences the forms of social organization, and thereby the patterns of individual association” (Melody, 1981, p. 5). “He examined the evolution of the dominant institutions, particularly the economic and political” (*ibid.*, p. 6). Other elements that serve to classify him as an institutionalist are the holistic perspective he

adopted, the special attention he paid to changes in technology, and the historical approach he took to his study of Canadian economics. Gray (1981) refers to Innis as “Canada’s greatest exponent of [institutional economics]” (p. 99) and notes that he defended Thorstein Veblen’s basic ideas, although he did disagree with Veblen’s deterministic slant when it came to technology (p. 101).

2.6.2 *Melody*

William H. Melody has become a widely published and successful institutionalist scholar who has held positions both as chief economist of the U.S. Federal Communications Commission and in departments of economics and communications at various educational institutions. He believes that the role of information is crucial to economics—“Information is as central to the study of the functioning of economic systems as is air to the study of the functioning of the human body” (Melody, 1981, p. 1313)—neoclassical economics dismisses information as a costless, omnipresent essence while institutional economists do not assume away the information issues. For this reason and others, Melody is an institutionalist.

In an article entitled *Information: An Emerging Dimension of Institutional Analysis* he writes “in the broadest sense, the social, cultural, political and economic institutions in any society are defined according to the characteristics of the shared information within those institutions. In the narrower economic sense, perhaps the most important resource determining the economic efficiency of any economy, industry, production process, or household is information and its effective communication” (Melody, 1987, p. 1313).

Although there is much work to be done in refining institutional understanding of information and communication, Melody (1981) notes that “in recent years there have been only a few economists working directly at the intersection of economics and communication and information institutions. Leaders among these include Herbert I. Schiller and Dallas W. Smythe” (p. 1324). In the field of communications, other recognizable scholars who operate within an institutionalist paradigm are James W. Carey and Robert E. Babe.

2.7 Conclusion

Institutionalism is a way of looking at the institutions of society and analyzing their effects on that society. Having emerged from the philosophical background of pragmatism, institutionalism has similarities to symbolic interactionism and links to cultural studies and postmodernism. Institutionalism arose as an alternative paradigm to neoclassical economics and its relation to the latter matches the process of paradigmatic substitution described by Thomas Kuhn. It is currently being employed in the field of communication studies, and is finding much favour among scholars focusing on the role of information in society and on development communications. Further applications of institutionalism within communications will certainly enrich the field as there is much to be learned from this type of inquiry.

3. Defining Development—An Institutional Perspective

3.1 Development is...

With so many agencies devoted to its realization, so much money spent in pursuit of it, and so much work done its name, one would think it reasonable that there would be a widely accepted definitive definition of development. Strangely though, this is not the case. Development is a multi-dimensional concept, its image continuously changing to reflect the personal agendas and knowledge levels of those who define it.

3.1.1 Changing concepts of development

Perceptions of development and how it should be achieved have changed dramatically over time. Formal development assistance began in 1945 with the postwar formation of the World Bank, and the United Nations agencies. In the 1950s the West was seen as the epitome of development and thus industrialization and urbanization were seen as the goals for less developed countries (LDCs). In the 1960s there was great optimism and a push for capital intensive technology, centralized economic planning, and blaming underdevelopment on internal national problems. Dependency theory was formulated, accusing developed nations of fostering dependence by LDCs. The media was seen as a key player in development efforts; the magic bullet theory was widely accepted. The 1970s were, in contrast, marked by pessimism as development initiatives were not generating the expected results. Alternative paradigms of development began to emerge, which focused more on the poorest groups in society, emphasized participation by

indigenous peoples, focus on small technology, and basic human needs. The 1980s saw an even greater focus on participatory decision-making, more culturally sensitive models of development, and a recognition of the right of indigenous people to communicate.

(Melkote, 1991, pp. 15-18)

Gillis et al. (1992) present a more economics oriented summation of these developments:

For two decades in the mid-twentieth century, industrialization through import substitution—was considered by many as the shortest path to development. In the 1970s, labor-intensive techniques, income redistribution, and provision of basic human needs to the poor gained popularity as keys to development. Many economists now counsel governments to depend substantially on unfettered markets to set prices and allocate resources. Another school of thought once suggested that development is only possible if preceded by a revolution that eliminates existing elites and replaces the market with central planning. A different theme is that development will be possible if there is a massive shift of resources, in the form of foreign aid and investment, from the richest countries to the poorest. (pp. 14-15)

There is now recognition that mutli-sectoral approaches are needed, as “no single factor is responsible for underdevelopment, and no single policy or strategy can set in motion the complex process of economic development” (*ibid.*, p. 15).

3.1.2 *Why do we need a definition?*

It is necessary to have a clear definition of what it is that we are striving for. Myrdal (1974) was dissatisfied with the hazy notions of development that were circulating in his day, declaring that “the first requirement of a scientific analyst is that he should clearly define the concepts he is utilizing” (p. 729). Development definitions that focus on one aspect of the economic system will focus development efforts at achieving that aspect of development and may ignore other important non-economic aspects. Similarly, definitions that focus on less quantifiable aspects, such as empowerment of the people, will direct their attention to achieving this goal, and focus less attention on other areas, such as economic growth. How development is defined orients those working to achieve it.

3.2 **Development: More Than Just Economic Growth**

Gillis, Perkins, Roemer, and Snodgrass’ widely used neoclassical text on economic development states that

Economic growth refers to a rise in national or per-capita income and product. If the production of goods and services in a nation rises, by whatever means, one can speak of that rise as economic growth.

Economic development implies more...in addition to a rise in per-capita income, [it] implies fundamental changes in the structure of the economy...two of the most important of these structural changes are the rising share of industry, along with the falling share of agriculture, in

national product and an increasing percentage of people who live in cities rather than the countryside. (1992, p. 8)

This statement illuminates their bias towards an economic concept of development but clearly notes a distinction between pure economic growth and economic development. For Gillis et al. economic growth is an integral part of development: "...while economic development and modern economic growth involve much more than a rise in per-capita income or product, there can be no development without economic growth" (*ibid.*, p.9). Melkote (1991) illustrates the corollary, writing that "in the seventies, realization dawned that development could no longer be viewed as just economic development, or in a more narrow sense, as 'economic growth'" (pp. 179-180).

Melkote (1991), writes that development, ...as noted in the dominant paradigm, is an ethnocentric conception of what progress should be. It describes the type of modernization that has been achieved in the countries of West Europe and North America....Most of the earlier models defined development in rather narrow terms. They viewed development as economic growth obtained through greater industrialization and accompanying urbanization. Development performance was thought to be described through measures such as the GNP and per capita income levels. (p. 189).

Although Gillis et al.'s definition of development gives evidence to the fact that this paradigm is still being used widely, this definition needed a broader scope. Melkote believes that "any discussion of development must include the physical, mental, social,

cultural, and spiritual development of an individual in an atmosphere free from coercion or dependency” (*ibid.*). While somewhat utopian, Melkote’s understanding of development illuminates the need to consider more than just the economic aspects of life.

Bessette (1996) notes that

It is now increasingly recognized that people’s active participation is an essential component of sustainable development. Any intervention with the intent of achieving a real and sustainable improvement in the living conditions of people is doomed to failure unless the intended beneficiaries are actively involved in the process. (p. 9)

He is also quick to point out that this participation required must be *real* participation:

“Unless people participate in all phases of an intervention, from problem identification to research and implementation of solutions, the likelihood that sustainable change will occur is slim” (*ibid.*).

Answering criticisms about the ability of people to participate, Servaes and Arnst (1993) write:

Rural peoples are not uneducated, nor is indigenous knowledge backward or substandard. Put simply, it is a different understanding and analysis formulated in response to differing contexts and environments. The claim is not that rural farmers are the foremost experts in, for example, macro-level planning, but they are often the most qualified to decide how, or if, such plans or policies apply or should be applied at the local level. No one

is more knowledgeable about local situations than people living in those contexts. (p. 44)

Once exposed to the options available for changing their condition, indigenous people are capable of choosing a path for their own development.

3.2.1 How institutionalism contributes to the discussion

Brinkman (1995) makes a good case that even recent attempts by neoclassical economists at a dynamic model of development merely equate economic development with economic growth, and “the dynamics of technological change and its impact on the economic system, and the importance of institutional adjustment and transformation, are still kept outside the paradigmatic boundaries of analysis.” (p. 1175)

However, neoclassicists Gillis, et al, (1992) while noting that their text “draws extensively on the tools of classical and neoclassical economic theory” recognize that

Development involves major issues for which these economic theories do not provide answers or at best provide only partial answers. Economic theory tends to take the institutional context...as given. But development is concerned with how one creates institutions that facilitate development in the first place. (p. 16)

This provides evidence for Marc R. Tool’s (1993) assertion that development economics is institutional even without institutionalism (p. 33).

3.3 Development For and By Whom?

Historically, development assistance has been initiated by an agency from the developed world that would assess what it determined to be the needs of an LDC and would then put in place programs to meet that need or would provide economic loans or grants to LDCs in the form of tied aid. That is, the money would be given to the developing country with conditions, such as requirements to purchase all supplies from the donor country or restrictions on which sectors of the economy the money can be spent in, attached. There were some successes with this approach, but generally it was not all that effective (Melkote, 1991).

Eventually, it was realized that one of the reasons for the lack of development was that this top-down strategy was not working and that an approach that began with the people was needed. From its beginnings in the 1970s this movement towards participatory development has been slow to materialize, even though, in principle, it has been accepted by the development community. White (1994) writes,

The euphoric word 'participation' has become a part of development jargon. Now, no respectable development project can be proposed without using this 'in' word. More than this, a project proposed nowadays can rarely be funded without some provision for the 'participation' of the people. This has been the case for at least the past decade. (p. 16)

Gillis et al. (1992) note the importance of grassroots participation in their text on economic development:

A key element in economic development is that the people of the country must be major participants in the process that brought about these changes in structure. Foreigners can be and inevitably are involved as well, but they cannot be the whole story. Participation in the process of development implies participation in the enjoyment of the benefits of development as well as the production of those benefits. If growth only benefits a tiny, wealthy minority, whether domestic or foreign, it is not development” (pp. 8-9).

However, despite best intentions, what is accepted in principle is not always easy to put into practice:

It is relatively simple to say that participation is an important component of development and that ‘involving’ the unempowered poor is fundamental to development, which leads to the eradication of poverty and injustice. But mobilizing people at grass roots to ‘participate’ is neither a small task, nor is it a simple task. There is no way to brush aside the concerns and complexities regarding the concept of participation. (White, 1994, p. 16)

Part of the problem seems to be pinpointing exactly what true participation entails. White says

...the word ‘participation’ is kaleidoscopic; it changes its color and shape at the will of the hands in which it is held.... The kaleidoscope analogy fits because participation is a complex and dynamic phenomenon, seen from

the 'eye of the beholder,' and shaped by the 'hand of the powerholder.'

(*ibid.*)

Melkote (1991) says that real participation goes beyond seeing physical outcomes and includes empowerment of the people:

How would it be possible to bring about effective participation of the masses at the grassroots in the development process? One useful method would be to consider the creation of viable institutional structures at the interface between the agencies of the government and the 'anonymous' masses wherein they could be actively involved in all issues that concern their welfare.... True participation... would go beyond such goals as higher productivity and better health habits, to bringing about conscientization¹ of the masses on their extremely unequal social and spatial structures. (pp. 191-192)

Deshler and Sock (as cited in White, 1994, p. 17) identified two levels of participation:

Pseudo-Participation was categorized as:

- Domestication—This involves informing, therapy, and manipulation.
- Assistencialism—This includes placation, and consultation.

Genuine Participation was categorized as:

- Cooperation—This refers to partnership and delegation of power.
- Citizen control—Which means empowerment.

¹ Freire (1973) developed this notion of *conscientization*, which involves educating people to critically analyze and interact with their world.

These concepts appear to be derived from the work of Paulo Freire (1973), which focuses on empowering people through engaging them in critical thought about their world. He is especially critical of assistencialism which he defines as a Latin American term “...to describe policies of financial or social assistance which attack symptoms, but not causes, of social ills” (*ibid.*, p.15).

Yoon (1996) lists four ways participation is manifested in development projects:

- Participation in implementation
- Participation in evaluation
- Participation in benefit
- Participation in decision-making

and notes that “some development initiatives provide people with opportunities for all four ways of participation. Many do not, and restrict participation to one or two ways” (p. 40). Yoon reports that there is much criticism of implementation, evaluation, and benefit sharing as being false participation, while others argue that these means of participation “...allow people to build up capacity to participate in decision-making” (*ibid.*, p.41)

Servaes and Arnst (1993) elaborate on what participation means, using an institutional perspective:

Participation is often taken as a ‘component’ or ‘feature’, to be ‘included with’ or ‘added’ on to traditional strategies. It is not an innovative ‘formula’ that is ‘diffused’ to the masses. Neither is participation a stock mechanism that is easily implemented, highly predictable or readily controlled. It is a process that unfolds in each unique situation, and to

prescribe how that unfolding should occur via rigid models or strategies is not just counterproductive, but is the antithesis of authentic participation.

(p. 46)

Therefore the dynamic approach of institutionalism is quite compatible with participatory development but the more static models of neoclassical economics is a more difficult fit.

Development needs to strive for genuine participation. Marlene Cuthbert (personal communication, May 18, 1996) says that you know that you have real participation in a development project "...when the participants take ownership of the project and run with it, especially when any outsiders involved become redundant".

3.4 Institutionalists Tackle the Issue

Throughout the evolution of development thinking institutionalists have been attempting to craft an institutionalist approach. Several of these efforts, drawn from the pages of the *Journal of Economic Issues*, are summarized and evaluated here. The next section will attempt to synthesize the best of these into a contemporary institutionalist definition of development.

3.4.1 Gunnar Myrdal

Back in 1974 Gunnar Myrdal wrote an essay entitled *What is Development?* in which he sought to provide a satisfactory understanding of the term 'development'. He believed that the only logically tenable definition of development was "the movement upward of the entire social system" (p. 729). The social system he referred to includes

...the so-called economic factors, all noneconomic factors, including all sorts of consumption by various groups of people; consumption provided collectively; educational and health facilities and levels; the distribution of power in society; and more generally economic, social and political stratification; broadly speaking, institutions and attitudes—to which we must add as an exogenous set of factors induced policy measures applied in order to change one or several of these endogenous factors. (*ibid.*, pp. 729-730)

Thus, Myrdal brought an explicitly institutionalist framework to bear on the concept of development.

He realized that his definition was not perfect , writing that “there is still much confusion, much housecleaning to be undertaken” (*ibid.*, p.736). However, contemporary discussion about development, which had begun to take into consideration more than just bare economic indicators, caused him to look forward with hope:

As this movement toward a new and more realistic approach [to development] is gathering momentum, interest is becoming focused on the close relations between greater equality and higher productivity and on the more radical institutional reforms founded upon an understanding of how these two purposes are adjoined. (p. 736)

Myrdal's definition, while ahead of its time in many respects, did not clearly advocate participation by the people and presented a fairly linear conception of development while it is now generally recognized that development is not a continuum

from LDC to DC but means different things to different peoples. Nevertheless, Myrdal's work does provide a foundation for institutionalists to build upon.

3.4.2 *Meb Bolin*

By far the most comprehensive attempt at an institutionalist perspective on the issue of development to appear in the *Journal of Economic* in over a decade has been Meb Bolin's paper, *An Institutional Perspective on Economic Development*. Presented at the Annual Meeting of the Association for Evolutionary Economics in 1983, it was published in the June 1984 issue of the *Journal of Economic Issues*. It is unfortunate that what will be revealed as a distorted perception of development received such a wide audience. What is even more disheartening is that there were no voices of dissent expressed in subsequent issues of the journal.

Bolin (1984) draws very little on the work of her predecessors and contemporaries in institutionalist economics, except in general terms. She begins her article by pointing out the need for an institutionalist perspective on development:

The broad outlines of an alternative approach [to the past neoclassical approaches to development] have been emerging from the efforts of the revitalized institutional school of economics. Institutionalists emphasize that development is a problem-solving process. In the absence of a 'problem-solving' complex of attitudes and values, technology transfers are seen as little more than benevolent gestures. Institutionalists stress that the essence of development is evolution and adaptation. In a static world, all that would be required to bring about development would be capital and

technology transfer...But in a dynamic world, prices, costs, and markets change. Technology emerges and evolves, and unforeseen problems arise. (p. 644).

Thus Bolin makes a reasonable case for the suitability of institutionalism to the development process.

Problems do not arise until Bolin attempts to create a concrete approach with which institutionalists will be able to aid in development, without ever really defining what development is. From the article one would infer that she seems to be adopting the attitudes and values of the “developed” nations. She declares “that the reason Third World countries have not developed is because they lack the necessary set of attitudes and values. Therefore, if we are going to aid development of a Third World country, we must devise a method of instilling the necessary values” (Bolin, 1984, p. 645).

In order to “instill” these “necessary values” Bolin postulates that “we have to devise a Development Potential Index (DPI) that would allow us to concentrate our efforts where there are realistic prospects for development” (*ibid.*, p. 646). There is no pause given to consider who decides which values are “necessary” and what criteria will be used to select them. In respect to using the DPI to target areas that will provide fertile ground for development initiatives, it does make sense to instigate development initiatives where they will be likely to succeed, however, the indicators that Bolin includes in her DPI are not indicators of areas with good potential for development, but instead, reflect a distorted definition of development and do little to further institutionalist scholarship in

this area. In addition, focusing development activities only on countries with high DPIs does nothing to help those peoples and countries that are most in need of assistance.

To begin compiling a DPI, Bolin proposes that “one key indicator would be a measure of the secularity of the society,” rationalizing that the Enlightenment brought about development in Western Europe and therefore the abandonment of religion is a sure sign that an area is ready for development. She writes that secularity could be measured by

(1) classifying art work and literature as either secular or religious, and thereby arrive (sic.) at an artistic secularity ratio; (2) measuring the proportion of property under the control of religious institutions; (3) measuring religious influence in government; (4) determining the proportion of secular to religious personnel in various levels of education; (5) analyzing religious content of textbooks in science and history; and (6) comparing relative levels of compensation of teachers of secular versus non-secular subjects. (*ibid.*, p. 646).

This equating of secularization with development potential is completely in conflict with respect for indigenous cultures, many of which are inseparable from their religions, ignores the religious foundations upon which many of today’s “developed” nations were founded, and reflects an ignorant intolerance of belief systems different from Bolin’s own.

Melkote’s (1991) exploration of the issue of values and religion in development show that Bolin’s ideas reflect what was the dominant mode of development thinking, in the nineteen fifties and sixties. Weber (1964, cited in Melkote, p.48) writes “Oriental values and

religions were seen as a bulwark of traditionalism and a repository of ideas that were incompatible with modernity.” This attitude has since been discredited, and, as Babe (1995) notes, “religious experience and teaching affirms that all exist in the context of a larger, spiritual whole” (p. 224).

Another of the indicators Bolin uses is a fatalism index. She writes,
One of the most characteristic attitudes in industrial countries is the belief in the ability to solve problems and control the course of events. Third World countries, on the other hand, exhibit a high degree of fatalism and reliance on chance. (*ibid.*, pp. 646-647)

Again, this indicator attacks core belief systems and is far from universally accurate. It could be argued that the developed world has caused far more problems than it has overcome by its overly optimistic opinion of its own ability to solve problems and control the course of events.

Bolin’s second factor to be included in a DPI is academic freedom, which she would arrive at by

(1) measuring the number of incidents of overt intervention by outside authorities in the academic process, (2) measuring the frequency of criticisms of authority emanating from universities, and (3) comparing textbook and course content with that of secular universities in the United States (*ibid.*, p. 646).

The first two factors seem to have some merit but the third is clearly implying that countries that want to develop should be aspiring to pattern their educational systems and content after that of the United States!

Bolin's academic status indicator is sure to find favour with some academics in developing nations but its value for development in general is questionable:

Technological societies are characterized by a relatively high social status for their professional truth seekers. An index of academic status might be constructed on the basis of (1) the presence of academics in policy making councils of government, and (2) income of academics relative to other professions. (*ibid.*, p. 646)

Academics certainly do have a role to play in society. However, their importance in relation to the overall picture of development in general is questionable, as it is the common people, and not the elites of society that generally are in a disadvantaged position and desiring change.

Delving into the realm of psychoanalysis, Bolin proposes that, Another psychological index might measure (1) identification with role models in children's literature and (2) identification of possible heroes of the populace at large. A preponderance of military heroes over figures from science and industry, for example, would indicate low development potential. (*ibid.*, p. 647)

Considering the high levels of illiteracy among LDC peoples (World Bank, 1990), and the shortage of reading materials in many indigenous languages, one has to wonder how Bolin

thinks that children are going to be able to identify with role models from children's literature. Her second statement leads one to question how people without access to news about their own country (Kumar, 1991, p. 4), which may, in reflecting the civil unrest currently taking place in many LDCs, be dominated by images of wars and the military anyway, is able to make heroes of people they have little access to from the worlds of science and industry.

Bolin's two other indicators, indices of social mobility and journalistic freedom, are not quite as controversial as their relationship to development potential is less difficult to see than the other items just mentioned. Overall, Bolin's paper has little to contribute to a participatory framework of development and was reviewed here only because it is one of the few attempts at an institutionalist approach to development in existence and because it highlights the lack of a truly participatory and institutional approach to development.

3.4.3 *Daniel W. Bromley*

In 1985 Daniel W. Bromley wrote *Resources and Economic Development: An Institutional Perspective* with the express purpose of presenting "a comprehensive argument in favor of the proposition that an institutionalist perspective can be of considerable analytical power in understanding the current economic problems of the so-called less-developed countries (LDCs)" (p. 779). He succeeds in showing the applicability of institutionalism to development, writing ,

I would suggest that the development problem in the newly independent tropical countries is one of structure. It is not a problem of low incomes, it is not a problem of incorrect prices, it is not a problem of lassitude, it is not

a problem of badly functioning markets, and it is not a problem of food production falling behind population growth. These performance indicators are but symptoms of the real development problem, which is structural in nature....It is this structure—and the institutional arrangements that determine who will define that structure—that indicates how independent agents will behave with respect to each other, and with respect to the natural resource base on which the country depends. (*ibid.*, pp. 779-780)

However, he does not ever really define what development is. He does note that “Orthodoxy would tend to view the development problem as one of getting prices right” (Bromley, 1985, p. 781) and discredits this view by noting that,

...markets can only reflect a prior underlying structure of entitlements that indicate who has rights, duties, privileges, no rights, power, liability, immunity, and no power...To believe that markets determine value is to believe that milk comes from plastic bottles” (Bromley, 1985, p. 781).

His interpretation of neoclassical economics is somewhat narrow, as it discounts the attempts of many academics to incorporate more than the basics of supply and demand to neoclassical development economics. Certainly, Gillis, Perkins, Roemer & Snodgrass’ (1992) text on this subject includes discussions of political considerations, population effects, and the role of education and health, amidst its discussions of fiscal policy and market systems. Perhaps it would have been more suitable for Bromley to note a need for

more of an institutional perspective, than to state that there is no room for non-market considerations within neoclassical thought.

Bromley's work does have a participatory slant, as he says,
....I would...suggest that the average citizen, who is constantly involved in
'collective action in restraint and liberation of individual action,' is much
more attuned to the institutional realities of the world than is the orthodox
theorist who can, and usually does, assume away that dimension of daily
life" (1985, pp. 794-795).

So from Bromley's efforts one can draw confirmation of the necessity of focusing on
institutional structure and of respect for the wisdom of the average citizen.


3.4.4 Mohammad Omar Farooq

Farooq (1988) successfully attempts to link institutionalism with the Basic Needs
Approach (BNA) to development. After surveying the field he notices that,

...there does not seem to be any concrete or specific institutionalist
approach to the economic development of the LDCs. For these countries
the institutionalist goals of development are not well-defined. If the goals
are generally defined as continuous improvement of the level of living, then
there is no difference between institutionalist and orthodox goals of
development...

He proposes filling this vacuum by adopting the Basic Needs Approach:

To make itself relevant to the LDCs, institutionalism either has to formulate
its own plan-specific, policy-oriented approaches to development—which it



has not done—or it has to identify, evaluate, and, if necessary, modify the existing approaches that are potentially in harmony with institutionalism. BNA seems quite compatible with the basic tenets of institutionalism and therefore deserves the attention of institutionalists. (*ibid.*, p. 365)

Farooq identifies the Basic Needs Approach as one which calls

...for the elimination of urban bias in both product and technology and for the reorientation of development efforts in at least two ways: (a) more emphasis on producing those goods and services consumed by the poor and (b) creation of employment for the target groups by using appropriate technology and providing public services, especially in the areas of education, health, and housing, until the poor can pay for these basic needs. (*ibid.*, p. 363).

He notes that, “although BNA itself lacks an evolutionary view of the problems of underdevelopment, many aspects of both BNA and institutionalism indicate a significant degree of convergence between them,” (p. 365) and goes on to conclude that “...BNA and institutionalism supplement each other” (p. 368).

From Farooq’s work more evidence is found for an institutional development framework that recognizes the multi-sectoral nature of development and the need for a dynamic model. Farooq’s thesis that BNA and institutionalism supplement each other is reasonable, although one could argue that a truly institutionalist approach to development would reject the pre-ordained goals of BNA and instead focus on the needs of the people as perceived by the people. This approach is far more situation specific and therefore

more in keeping with the institutionalist understanding that existing societal structures are an important determining factor for future economic and social outcomes.

3.5 A New Definition

Of all the contributions examined, Myrdal's attempt at an institutionalist understanding of development has the most to offer in terms of composing a contemporary institutionalist framework for development. His concept of an "upward movement of the entire social system," if reoriented as being defined by the people of the country or region under discussion, reflects a participant-oriented perspective. The "upward movement" clause alludes to a linear progression, which, as has been mentioned is no longer acceptable so 'upward' must be replaced with 'positive' and those who define whether a movement is positive or not must be identified as the common people. Adding in the Bromley and Farooq's emphasis on the need for development to affect structure, a new, participatory, institutional framework for development is formed which reads:

development is the process of the entire social structure (including economic and non-economic aspects) moving in a positive direction as defined by the people who abide within that system.

In order to avoid misinterpretation, some of the terms in this definition are defined as follows: the reference to the "*entire* social structure" is a recognition of the inter-related nature of all institutions and not a requirement that every facet of the social structure has to change in order for there to be some sort of development (e.g. if the political structure changes so that people are better able to control their own destinies but the economy does not improve at the same time one would not deny that development had taken place); that

change should move in a “*positive* direction” is an attempt to emphasize that change should be beneficial and not just change for the sake of change; those who determine whether a change is positive or not are described as “the people who abide within that system,” leaving the determination of success or failure to the people affected (it might best be redefined as the smallest practical grouping of indigenous stakeholders in each situation).

Now that we have a basic definition of development, and thus an idea of what the goal of a development agency’s programs should be, it is possible to examine World Bank initiatives, focusing on those that involve computer mediated communication. As this analysis progresses, the types of policies and procedures that are in keeping with an institutional and participatory theory of development will emerge. Simply attempting to list these policies would be difficult, and arguably far less effective, than analyzing existing policies in relation to the understanding of development which we have just created. Therefore, the following chapters will look at the World Bank and its policies towards computer mediated communication as a tool for fostering development.

4. The World Bank

4.1 What Is It?

The World Bank is a group of four interrelated organizations with differing duties but a joint commitment “to promote economic development in emerging economies” (World Bank, n.d.a). The Bank’s 1995 annual report outlines the Bank’s purpose as being “to promote economic and social progress in developing nations by helping raise productivity so that their people may live a better and fuller life” (World Bank, 1995, p.4)

The four components of the World Bank are:

- The International Bank for Reconstruction and Development (IBRD)
- The International Development Association (IDA)
- The International Finance Corporation (IFC)
- The Multilateral Investment Guarantee Agency (MIGA)

Each entity has specific duties and funding roles.

The *International Bank for Reconstruction and Development* “...borrows in world financial markets and lends to its members at rates not much higher than it pays to borrow with its AAA credit rating” (*ibid.*). This is the arm of the World Bank group that is most commonly referred to as ‘The World Bank’. “It is owned by its 179 members, which are its shareholders, the IBRD lends to member governments and to public or private borrowers with the member government’s guarantee” (*ibid.*).

The Articles of Agreement of the International Bank for Reconstruction and Development set out five purposes for the IBRD:

- i) facilitating the investment of capital for productive purposes in member's countries
- (ii) promote private foreign investment by means of guarantees or participation in loans and other investments made by private investors; and when private capital is not available on reasonable terms, to supplement private investment by providing finance for productive purposes
- (iii) encouraging international investment for the development of the productive resources of members
- (iv) to deal with the most useful and urgent projects first
- (v) to conduct its operations with due regard to the effect of international investment on business conditions and to assist in transitions from wartime to peacetime economies. (World Bank, 1989)

The International Development Association "...provides financing on highly concessional terms for the world's poorest countries..." (primarily those with annual per capita incomes less than \$865) which it finances through government contributions. "IDA operates more like a foundation than a commercial bank, with loans extended at lower than commercial rates (including a substantial grant element) and with capital replenished regularly by donor governments" (*ibid.*).

The *International Finance Corporation* is the largest multilateral source of loan and equity financing to private enterprises in the developing world. It frequently borrows in capital markets throughout the world to raise these funds (*ibid.*).

The *Multilateral Investment Guarantee Agency* “...provides political risk insurance to private foreign direct investors and investment marketing and legal advisory services to developing host governments on how to attract foreign investment” (*ibid.*). Essentially, MIGA provides “...insurance (guarantees) to foreign private investors against the noncommercial (i.e. political) risks of currency transfer, expropriation, and war and civil disturbance in developing countries” thus mitigating the political risks of investing in these areas (*ibid.*).

4.2 World Bank Policy

Isolating exactly what the World Bank’s policy is on many issues is difficult, to say the least. All of the Bank’s discussion papers, and many of its books and publications carry the disclaimer that the materials contained within them,

...including any findings, interpretations, and conclusions, are entirely those of the authors and should not be attributed in any manner to the World Bank, to its affiliated organizations, or to members of its Board of Executive Directors or the countries they represent. (Galal & Shirley, 1994, Hanna & Boyson, 1993, Hanna & Schware, 1990, etc.)

Sussman (1991) discloses that

It is well known, and acknowledged even by its own officials that the World Bank is one of the most secretive organizations in the world.

Despite the fact that it is nominally a public institution and funded largely through government contributions, many of its staff reports are hidden from the executive directors who supposedly run the Bank and from all but a very few officials from the client governments for whom they are putatively hired.... (p. 46)

The Bank, in Sussman's opinion, "...is also an administratively and regionally hierarchical institution, dominated by an elitist board of governors...The Bank's careful avoidance of public scrutiny and social accountability makes the few critical studies that do exist all the more remarkable" (*ibid.*, pp. 46-47).

Because of the elusiveness of definitive World Bank policy statements, third party criticism and analyses of World Bank policies are used extensively in this thesis.

4.2.1 Cost of information

The Bank recognizes that there is a cost to acquiring information (in contrast to the ideal neoclassical model of perfect competition which posits that perfect knowledge is freely accessible to everyone) but foresees that cost decreasing in the future:

Costs [for information technology] are dropping so rapidly that, within the next twenty years, the exchange of information may be practically a free commodity. (World Bank, n.d.b)

The Bank recognizes the difficulty of incorporating information into traditional economic analysis. A World Bank paper prepared by Talero & Gaudette (1996) quotes Peter Drucker:

Knowledge, the new resource for economic performance, is not in itself economic. It cannot be bought or sold. The acquisition of knowledge has a cost, as has the acquisition of anything. But the acquisition of knowledge has no price. Economic interests can therefore no longer integrate all other concerns and interests.

That the Bank is dealing with the cost of information shows a willingness to go beyond received economic doctrine and deliver its own analysis.

4.2.2 Participation

The Bank seems to recognize the value of participatory development, as Talero & Gaudette (1996) remark that “Communities and nongovernmental organizations often have the best local connections for efficient and appropriate development efforts. Alliances that work through these agents should be encouraged.” Actual evidence of genuine participation in World Bank initiatives is difficult to find in the available literature.

There is at least an understanding of genuine participation at the World Bank: Participants in a 1992 Bank-sponsored workshop on participatory development cautioned that there is no blueprint for promoting participation. It was suggested that the Bank should conduct an institutional analysis in borrowing countries to learn who is doing what and to build on ongoing processes and capabilities. The Bank, it was felt, should support more pilot activities to demonstrate what can be done and give organizations opportunities to learn. Participation should be promoted as early as

possible, during preproject conceptualization and identification. (Bhatnagar and Williams, 1992, p. 7)

4.2.3 Objectivity

The World Bank believes it has the ability to provide unbiased/objective expertise and opinions. Urey (1995) notes that “...Bank officers often explicitly label their ideas: ‘nonideological’” (p. 123).

There have been severe criticisms of the Bank’s assertion of its transcendence of bias. Amsden (1994, p. 2, quoted in Urey, 1995) notes that “The Bank is inherently a political organization yet purports to produce objective economic analysis” (p. 128).

The myth of objectivity has been well explored in academic literature by Myrdal (1968), Patton (1986, pp. 195-220), and many others, yet the World Bank still insists that it is an objective third party with no vested interests. Sussman (1991) notes the Bank’s view of its own objectivity and then responds by accusing the Bank of being very subjective:

Certain critics of Bank policy, on the other hand, have seen the institution as being largely ignorant of, or insensitive to, the real human needs of most LDCs and as disguising benevolent-sounding development jargon for its actual political economic intention of preserving market opportunities for itself, its sister agencies, including the International Monetary Fund (IMF), and transnational capitalism. (p. 46).

The Bank’s continued denial of its own political objectives and its insistence of its ability to be objective only serves to further damage its credibility.

4.2.4 Markets

World Bank literature suggests that the World Bank prefers to use market incentives and disincentives to deal with the changing nature of the economy in which the growing importance of information has played a part. It is open to government intervention when that appears to be a more efficient means of dealing with the situation:

During adjustment to the information economy, market failures can occur and government action can sometimes be effective, but only after the right policies have been implemented to eliminate market distortions.

Infrastructure projects of great potential benefit might not get started on their own, and governments must often play a catalytic role. When the private sector requires initial assistance, governments can step in with a critical boost to empower private firms, the main engine of growth. (Talero & Gaudette, 1996)

A cursory overview of some key policy areas shows that the Bank recognizes that there is a cost for information, that it supports participatory development in principle, that it believes it is objective, and that it strives to use market forces rather than government intervention to achieve its objectives. These assumptions form the basis for much of the World Bank's policies and procedures relating to CMC. The next two chapters will look at Bank policy in relation to information technology, the Bank's new information for development initiative, and two key Bank telecommunications policy areas.

5. The World Bank and the Information Economy

5.1 Historical Role of CMC at the World Bank Group

Perceptions of computer mediated communication have changed over time at the World Bank, reflecting the radical and rapid evolution of information as a key resource.

The World Bank's

...Old Agenda, as implemented to 1985, focused on building the efficiency of the main public [telecommunications] operating entity and funding major new investments to meet demand....Since 1985 we have therefore shifted our emphasis away from the traditional public telecommunications monopoly. Instead we have focused our attention on overall sector policies, regulatory environment, and institutional structures and assisted our clients in the formulation and implementation of sector strategies designed to meet demand. This approach has included advocating policies designed to promote new entry, competition, and private participation.

(World Bank, 1994)

Sussman (1991) describes the World Bank as “one of the principal architects of global telecommunications infrastructure” (p. 42) due to the influence it wields in financing and development assistance.

5.1.1 Reason for underdevelopment of CMC resources

The World Bank (1994) notes the puzzling situation that

...despite high economic and financial returns from investment...telecommunications suffers from a general shortage of state funds for investment, many competing demands (e.g. for more schools and hospital beds), and government appropriation of telecommunications operating surpluses for uses other than reinvestment.

They believe that this situation occurs because of four factors:

- telecommunications advances being dependent on foreign currency
- public orientation, rather than as a businesses
- lack of autonomy and incentives to perform, non-market objectives, lack of access to capital markets
- closed entry, even when the incumbent is unable to meet demand (*ibid.*)

Some of these “causes” are not necessarily problems (such as there being some non-market objectives for telecommunications systems) but others are and the World Bank has attempted to address them (e.g. privatization is one of their means of attempting to infuse telecommunications entities with autonomy and incentives to perform).

However, the difficulties listed above are not the only reasons that underdevelopment occurs; there are other issues of social and political structure that contribute to the situation. Sussman (1991b) critiques the World Bank’s assumption that “underdevelopment [in general, is]...largely the result of managerial, technical, and cultural shortcomings...rather than being grounded in specific historical conditions of hegemonic state relations and social and class oppression” (p. 283). The interests of developing nations have often been ignored or violated by the interests of those with more financial

and/or military power. After World War II, the hegemonic powers of the world decided to help Europe rebuild and provided grants and other assistance. However, these same powers did not extend similar assistance to what is now known as the third world, offering them loans instead of grants. These actions, and others like them, have had repercussions that are still being felt.

5.1.2 Separation of information technology and telecommunications

Hanna and Schware (1990) documented a World Bank project that attempted “...to address the development of an information infrastructure across different disciplines. Because of the Bank’s sectoral orientation, support to these kinds of broad-based, interdisciplinary information management improvement programs is rare” (p. 262). In fact, Bank reports separate information technology and telecommunications into two separate sectors (Hanna & Boyson, 1993, p. vii), making an analysis of computer mediated communication, encompassing both information technology and telecommunications, difficult.

5.1.2.1 World Bank and telecommunications

The Bank acknowledges that historically,

The level of funding by the World Bank Group has always been low in the telecommunications sector. In FY93 telecommunications operations made up about 1.5 percent of total Bank Group operations and monies; this number has remained fairly constant over the years, rarely going above 2 percent. But this underrepresents our impact on the sector. Because our

projects have typically been time slices of entire government investment programs, and because we have been active in technical assistance projects, telecommunications components of sector adjustment and public enterprise restructuring operations, and country economic work, our involvement has actually been larger. (World Bank, 1994)

Urey (1995) points out that “it is difficult to discern a pattern in the history of the Bank’s lending for telecommunications...”, largely because “...there has never been an explicit [World Bank] telecommunications policy” (p. 115) but indicates that there is currently a move afoot to create such a policy.

5.1.2.2 World Bank and information technology

Information technology is defined by the World Bank as “...the set of technologies for information processing, storage, retrieval and transmission” (Hanna & Boyson, 1993, p. vii). The World Bank has committed a large amount of funding to information technology related projects. In fact, “...IT components in Bank lending for fiscal year 1989 showed that significant IT components are present in about 90 percent of all lending operations” (Hanna & Schware, 1990, p. 255). The importance of information technology has only grown from there:

In many lending operations, the information system components constitute the primary means for addressing the institutional development and managerial improvement objectives for whole sectors, programs, and institutions. Often they are a critical tool for managing and monitoring structural adjustment programs, for building local analytical capacity for

policy reforms and debt management, and for strengthening public sector financial management and accountability. (*ibid.*)

Hanna & Boyson (1993) note several common problems in Bank lending for information technology, among which were two noting a lack of institutional focus and a lack of participation:

- inadequate attention to the enabling environment, including informatics policies, information and communication infrastructure, support services, and local consultants and vendor capabilities
- lack of management commitment and user participation, to define their information needs and priorities... (pp. 55-56)

5.2 Information Rich and Information Poor

There is recognition, on the part of the World Bank, that technological innovations have facilitated a new type of economy with which developing countries must now contend. Talero and Gaudette (1996) quote Drucker (1994) as saying “Developing countries can no longer expect to base their development on their comparative labor advantage—that is, on cheap industrial labor. The comparative advantage that now counts is in the application of knowledge.” Talero and Gaudette elaborate on this concept:

Without fast and successful adjustment, a developing economy can be hampered in many ways: Local production may be less competitive in international markets against better-quality, lower-priced, and more flexible

products. Productive firms might lose market share due simply to inability to connect to international trading networks and to participate on equal terms in markets. Research and development might stagnate without convenient access to international science networks. (*ibid.*)

Because of the possibility of ‘wired’ countries to advance their technological capabilities at lightening speed, “There is a real and present danger of deepening inequity of access to information both within and among [developing] countries” (Talero & Gaudette, 1996).

Talero and Gaudette do temper their warnings with a note of optimism: “The information revolution threatens to increase inequity, but it also provides tools to reduce poverty. A pro-poor agenda of technology-improved access to education, health care, and information is increasingly possible for developing countries” (*ibid.*). It is to this hope that we now turn.

5.3 CMC as a Development Tool

To combat the potential of CMC to exacerbate societal inequalities, and to instead encourage greater development in LDCs, the Bank advises that

Sectoral information networks must be developed. Social networks based on electronic communications are needed to enable alliances that connect institutions in agriculture, education, health, banking, industry, and other sectors. Once operational, these networks multiply opportunities for technical cooperation, research, coordination, information sharing, and private transactions. (Talero & Gaudette, 1996)

In essence, the Bank is seeking to have developing nations put CMC to work for them, instead of allowing CMC to dictate the terms and conditions of its use.

There are many potential uses for information technology in development: Information technology, when designed for the right job, can be deployed even in regions that lack adequate water, food, and power. This technology can be effective for many tasks, not least human and economic development. In fact, this technology is often indispensable in meeting basic needs. (Talero & Gaudette, 1996)

Heather Hudson (1995, as cited in Talero & Gaudette, 1996) notes that

“Telecommunications, as a means of sharing information, is not simply a connection between people, but a link in the chain of the development process itself.” Talero and Gaudette (1996) concur, writing that “There is a correlation between telecommunications and economic growth.”

In summary, the Bank sees great potential for CMC in the developing world: “Information technology and telecommunications in developing countries can transform old challenges and create unprecedented possibilities for sustainable economic development, just as it has for business in the industrial world” (Talero & Gaudette, 1996).

5.4 World Bank's View of Its Own Role in the Information Economy

A World Bank publication discussing telecommunications policies states:

We [the World Bank Group] must formulate joint country-specific approaches, develop more flexible and responsive technical assistance, and

ensure that Bank Group support will encourage and facilitate the reform process. (World Bank, 1994)

Sussman (1991) says that

The Bank sees its role in telecommunications as strategic, given that it is, as the former sector chief has said, “the principal multilateral source of financing for telecommunications in developing countries. The Bank has met part of the foreign exchange requirements for urban, local, long distance, and international telecommunications facilities, and has sometimes helped to bring in other sources of funds through cofinancing arrangements”... (p. 45)

The Bank sees itself as a facilitator, making it possible for the developing nations to join the “information society”:

The World Bank Group can help the development of the information economy primarily through strategic advisory services and mobilization of worldwide knowledge and expertise in support of individual country needs. The Bank can also offer financial products and guarantees as a lender of last resort. Finally, the Bank could maintain an experimental portfolio of projects to find new ways to accelerate development with information systems. In all cases, the Bank will adjust its advice and financial support to individual country circumstances and will consider the needs of both the client governments and the ultimate beneficiaries. (Talero & Gaudette, 1996)

5.4.1 Acknowledging difficulties

The Bank acknowledges that there are many difficulties to be encountered in the process of attempting to implement computer mediated communications in LDC's:

Fundamental limits [on advances in information technology] are still remote, and many constraints believed to be fundamental in the past have been breached. The knowledge to successfully apply information technology is another matter. The limits of this knowledge are readily apparent in the many failures and deficiencies of information systems at all levels. Improvement is occurring but slowly. This problem is, if anything, worse in developing countries. (Talero & Gaudette, 1996)

Recognizing this problem, the Bank advises developing nations to "...establish effective incentives and management schemes to facilitate adoption and effective use of new systems" (Talero & Gaudette, 1996).

5.5 Emphasis on Appropriate Technology

Among communication and development scholars there is a consensus that the technology developing countries implement should not just be whatever is cheapest or most available, but that it is important for long run outcomes to go with the most efficient and suitable technology. Sirois and Forget (1995) write,

...the most readily available technology—even if, in a longer perspective, an inferior one—can play the same role in the field of telecommunications that 'debased' currency plays in capital markets...not to think about [which

technologies should be used for optimum deployment of resources], and merely to assume that everything will fall into place as it should and that, if mistakes are made, they can be spotted and corrected at an acceptable cost—is simply not a defensible position. (p. 17)

The Bank seems to endorse this position, stating

In the absence of appropriate policy incentives, adequate quality standards, and competitive discipline, a society could allocate scarce development resources to information infrastructure investments that create waste or perversely increase social inequality. Such is the case when telecommunications services are available only to the urban rich, when incentives favor use of technology more for recreational than productive purposes, and when an excessive share of investments are directed toward military purposes. (Talero & Gaudette, 1996)

Some outside the Bank, such as Haque (1984) say that technology should be evaluated by “...whether it is appropriate, easy to maintain, efficient, cost-effective, compatible with the general level of technology and, most important, whether it is likely to help achieve the fundamental socio-economic goals of less developed nations” (p. 147).

The Bank also cautions against developing nations setting their sights too low when deciding what technology is appropriate: “Too narrow a definition of appropriate technology ignores the profound social implications of technology and risks consigning the world’s poor to a life of third-rate capacity and opportunity” (Talero & Gaudette, 1996).

As Mody (1984, p. 89, cited in Mehra, 1988, p. 66) observes, “Third World technology does not have to be restricted to kerosene lamp adaptations of slide projectors”.

Finally, the Bank admonishes that one must be realistic about the ability of information technology, recognizing that it is not a cure-all:

Wasteful information infrastructure investments also can occur because of inadequate definition of the expected benefits and inadequate measurement of the actual results. Benefits in terms of societal capabilities and institutional objectives can be and should be defined for projects, but it is very complex to measure the results objectively, and it is tempting to hide behind alleged intangible benefits. (Talero & Gaudette, 1996)

5.5.1 Leapfrogging

The World Bank is definitely aware of the potential for less developed countries to begin with no information infrastructure whatsoever and then to implement computer mediated communication systems that are on par with technology currently in use in developed countries, thus *leapfrogging* over intermediate technologies. Leapfrogging eliminates many of the costly evolutionary steps that more developed countries have gone through. It is the most effective and efficient means of providing communication links in areas where the latest technology applications (such as wireless telephony) are best suited to the needs of the region (such as a vast and rough terrain that would be difficult to wire). Talero and Gaudette (1996) from the World Bank write,

In developing countries, access to [the information] infrastructure is inadequate, and progress depends on telecommunications policy reforms

not yet implemented. Yet there is an opportunity for leapfrog—new technology can provide better, cheaper links to subscribers, while competing global operators can provide low-cost long distance connections. Developing countries can deploy telecommunications for lower costs per capita than was spent by the industrial world.

Further on in their article, Talero and Gaudette quote *AT&T's* managing director of consumer services for Asia as saying, “When a country goes from no infrastructure to the latest, it will leapfrog entire rungs of development” (*ibid.*).

Leapfrogging is quite widely accepted as a fact in the academic literature, with the exception of Mehra (1988) who opines

...the utopian vision that developing societies can somehow leapfrog into the information age is...flawed, not least because most of these countries lack the infrastructure and skills to run the technologies. There is no evidence to date of any society being able to leapfrog the industrial revolution on a major scale. (p. 64)

Perhaps Mehra is assuming too much is intended by the term leapfrog—most literature does not seem to suggest completely skipping over the whole process of industrialization, but merely bypassing costly and ineffective intermediate technologies.

5.6 Consideration of Societal Changes Related to CMC

As has been noted, implementation of CMC affects the flow of information in a society and therefore changes that society's entire structure. “The power of information technology , which has so much potential for social good, can also be harnessed for

selfish, dangerous, or even destructive ends” (Talero & Gaudette, 1996). Talero & Gaudette (1996) quote Sam Pitroda, who says

As a great social leveler, information technology ranks second only to death. It can raze cultural barriers, overwhelm economic inequalities, even compensate for intellectual disparities. High technology can put unequal human beings on an equal footing, and that makes it the most potent democratizing tool ever devised.

Under a section entitled “need and means to implement a major adjustment agenda” in Talero and Gaudette’s (1996) World Bank paper they suggest that a goal of World Bank information technology initiatives should be to

Create an information-friendly environment, characterized by coherent telecommunications reform and information policies; laws protecting investment, intellectual property, and individual privacy; open and well-regulated information and communication markets; education policies that favor a skilled labor force; and effective regulatory and standard-setting institutions.

They believe that such an environment “...supports availability, diversity, and low cost of information services and products” (*ibid.*).

Menou (1993), of Canada’s International Development Research Centre, emphasizes that a tradeoff between social and economic goals must occur: “Information development support seeks a balance between the development of infrastructure and the satisfaction of the information needs of the poorest segments of the population” (p. 32).

In discussing CMC and development, the World Bank's choice of Singapore as an exemplary LDC implementation of information technology is interesting to say the least.

The Bank notes that:

Singapore has demonstrated a strategic approach to information technology. Although not Bank-assisted, this case is a classic worth mentioning. Singapore is one of the most intensive producers and consumers of information technology in a group of countries (India, Hong Kong, South Korea, Singapore, and Taiwan) studied. In 1985 Singapore developed a new national information technology strategy that sought to integrate government-supported programs to improve productivity and competitiveness and to develop a stronger export orientation. The new plan focuses on information technology applications for the civil service, transport, and trade. The plan has worked very well to date. Singapore has one of the highest per capita growth rates in the world. (Talero & Gaudette, 1996).

That the World Bank could gush about the information technology applications in Singapore as a "classic case" without even mentioning that there could be some serious negative ramifications of the "surveillance society" that has been implemented in that country, reveals a startling lack of concern for the privacy and autonomy of Singapore's citizens. In addition, by holding Singapore up as an example to other developing nations the Bank is implying that there is no need for these nations to consider these issues either.

In short, the Bank is showing little regard for anything other than pure economic efficiency.

The World Bank has not taken into account that CMC has a destabilizing effect on political institutions—transcending state control over information in many cases, and furthering the reach of the state’s eyes in others. The flow of information (both within and between nations) and privacy are key issues that must be addressed when contemplating the use of CMC for development purposes due to the potential of information technologies to change the way society is structured. Jayaweera (1986, cited in Mehra, 1988, p. 66) says that “the social relations [new technologies] beget tend towards a progressive integration of the whole world into a single dominant economy, a single polity and a single culture.”

5.6.1 Culture

One of the potential negative effects of technology driven societal reorganization in LDCs is the dilution of national cultures as a result of the seemingly inexhaustible supply of foreign cultural products that are available. The Bank recognizes this danger:

Culture can be preserved; it can also be destroyed. Intellectual and artistic products of national cultures can be preserved and disseminated with information technology. But creative cultures and societies can also be overwhelmed by the influx of outside information, and sinister uses of information technology, notably computerized weaponry, certainly exist. (Talero & Gaudette, 1996)

To combat these potential negative effects of CMC, the Bank recognizes that “in the global information infrastructure, safeguards are needed and possible to protect the legacy of local and national cultures, the privacy of individuals, and the confidentiality of transactions against abuse by others, including the state” (Talero & Gaudette, 1996).

However, evidence of actual applications of this perspective are hard to find in the available World Bank literature.

5.7 Institutional Influence

The World Bank does make some attempt to consider institutional factors, as is evidenced by statements like “The [telecommunications] regulatory arrangements that are possible depend on the country’s political system and institutional endowment” (World Bank, 1994). However, the World Bank’s use and understanding of “institutional” differs widely from the use of the term in the context of institutional economics. For example, the World Bank makes a point of noting that “all investment projects should define expectations in terms of institutional objectives and societal capabilities, and all projects should include measurement of their actual results” (Talero & Gaudette, 1996) where the use of the term, when taken in context with the rest of the article, seems to imply that it is the World Bank itself and/or stakeholders it is working with who are the institutions whose objectives should set the tone for projects. It is not a call to take social and political factors into consideration.

5.8 Participatory Focus

World Bank documents state that in their efforts towards harnessing information for development they “...will seek broad participation” (Talero & Gaudette, 1996) and then go on to cite a 1994 paper by Talero which says,

It is the main economic actors—industry, business, services, governments, and households—that require information systems and are in the best position to identify their needs and lead the process of policy formulation.

Allowing the demand side to take a leadership role is more difficult than delegating it to a cadre of government analysts. Since the private sector is a major segment of the demand side, and since it has traditionally been more effective than government at large project management, this sector should have a prominent role.

The idea that it is those on the demand side of the equation who should dictate what information services and technologies they need is a good one which works well in the developed world. However, in the developing world, the basic definition of demand—desiring a good *and* having the financial resources to acquire it—precludes using this method as a means of ensuring participatory development. Samarajiva and Shields (1990b) discuss how transfers of public resources to the poor in society can be justified in a variety of means, but point out that “...one would be hard put to justify the unequal flow of public resources to the rich, which is what directly allocating funds for the provision of telecommunications services for those most willing to pay would amount to” (p. 235).

Markets simply do not adequately convey the demands of many LDC peoples because they do not have enough money to “vote” with.

A system which relies on the market to dictate demand will result in information systems that are tailored to the needs of those with the greatest purchasing power. However, it does little to redress the imbalance in access to information in developing nations, which is what the World Bank is seeking to do: “Participation by rural and poor segments of society in the information economy should be a strategic priority both for social and economic development reasons” (Talero & Gaudette, 1996).

The World Bank seems to consider that any initiative involving a national developing country entity, be it government or private sector business interest, qualifies as participatory. For example, Talero and Gaudette write,

To maximize its effectiveness and capitalize on its strengths, the Bank is changing its emphasis toward a strategic advisory role on information policy and toward brokering of effective partnerships for infrastructure deployment. As a client-oriented institution, however, the Bank will continue offering financing products such as loans, credits, investments, and guarantees when country and project circumstances so require and usually in the context of a national strategy or reform program. The Bank’s work will increasingly be carried out in partnerships with other international institutions, the private sector, NGOs and governments.

(Talero & Gaudette, 1996)

Rarely is there ever any mention of partnership with indigenous peoples, many of whose views are not adequately represented by government and business interests. The World

Bank seems to be shying away from participatory development. Certainly, involving constituents is not as simple and neat as bringing down autocratic policy decisions. Putting participatory development practices into practice is certainly difficult and the Bank cannot be expected to completely restructure itself and its policies overnight. However, efforts towards implementing participatory development policies will pay off in outcomes. These improved results from development efforts, as well as ethical considerations, demand that a participatory approach be used, therefore the World Bank must get over its unease at turning over power to LDC peoples and get on with implementing a more participatory program for international development.

6. Evaluating *infoDev*

This chapter will look at the World Bank's new Information for Development program and point out its congruence with and divergence from an institutionalist and participatory perspective of development.

6.1 *infoDev*

In April of 1996 the World Bank announced *infoDev*, the Information for Development program. *infoDev* is expected to promote social and economic development through applications of information and communication technologies.

infoDev's activity guidelines note that "*infoDev* will not fund activities that lack strong institutional support from government, non-governmental, academic or private sector organizations, since such support is necessary to ensure success and sustainability" (Kaufman, 1996) which shows they are paying some attention to the societal structures which are in place and to the wishes of nationals. Depending on what the Bank's definition of "strong support" is, there is opportunity either for indigenous organizations to take a key role in projects, or for nothing more than a cursory consultation with a handful of elites.

6.1.1 *Objectives*

There are five objectives that *infoDev* seeks to fulfill:

- I Creating market-friendly environments to accelerate global access to information and communications.

- II Reducing poverty and exclusion of low-income countries and social groups.
- III Improving education and health
- IV Protecting natural resources and the environment
- V Increasing the efficiency, accountability and transparency of governments.

(Kaufman, 1996)

infoDev materials expand on each of these objectives but a brief look at the explanation for the fifth objective is enough to present the flavour of the others. It reads,

Large productivity increases in government services are possible with information systems that simultaneously increase speed, volume, quality, transparency, and accountability of transactions. Well-designed information systems can become major instruments of public policy—powerful tools to implement, enforce, and evaluate policy reforms. (*ibid.*)

This is another case of the Bank focusing solely on issues of efficiency without considering the impact on societal structure. Issues such as how citizens will perceive and react to increased automation have to be taken into account. The Bank needs to make sure that its efforts at development result in a positive movement, and not just movement for the sake of moving.

6.1.2 Proposal screening

As part of the screening process, *infoDev* project proposals are required to exhibit very high leverage in one or more of the following areas:

- Development leverage
 - innovative nature of the idea
 - impact on one of the priority objectives of *infoDev*
 - sustainability in a market environment

- **Learning leverage**
 - replicability of outputs on a larger scale and in different environments.
 - complementarity of the idea with existing similar initiatives.
 - contribution to the development task of governments and international organizations in terms of new policy, scale, design or process features made possible.
- **Resource Leverage**
 - total resource mobilization brought about by an infoDev grant.
 - commitment of the proposing organization as evidenced through management sponsorship, in-kind or cash contributions, or quality of involved staff.
- **Partnering Leverage**
 - synergy created among institutions pursuing similar objectives.

While these criteria do contain an institutional focus in that they are taking other development initiatives, commitment of staff/organization, and the economic environment into consideration, there is no participatory focus. Evaluation criteria that value indigenous participation and/or development of projects by indigenous groups (other than government) would be a useful addition.

6.1.3 Internal quality criteria

infoDev has several internal quality criteria used in proposal evaluations. They are:

- **Feasibility**
 - Political feasibility (Are the key stakeholders in agreement?).
 - Institutional feasibility (Is there adequate institutional capacity to implement?).
 - Technical feasibility (Are technology and know-how adequate for the task?).
- **Quality of Design**
 - Specificity of outputs.
 - Clarity of roles and responsibilities.
 - Quality of performance and impact indicators.
 - Sustainability of outcomes.
 - Adequacy of financial resources.
 - Quality of work programming.
 - Quality of partnerships.

- Impact and Resource Use Efficiency
Estimated economic return on investment or cost benefit ratio.
Co-financing mobilized from other sources.
- Risks
Of implementation problems.
Of disappointing outcome.

Institutional feasibility needs to be expanded to include societal institutions, and not just the implementing institution, as is implied in the above text. Political feasibility defined as an agreement among key stakeholders does not place enough emphasis on those who are supposed to benefit from the project. Using quality of partnerships as a criterion is a step in the right direction, but a better step might be criteria more along the lines of quality of partnerships with indigenous peoples. Cost-benefit analysis of effects are likely a necessary part of evaluations for development projects, however, equally important, but overlooked in this list, is evaluation of non-monetary costs and benefits. Although more difficult to measure than financial gains and losses, the impact on institutional factors and individual growth and development should not be ignored.

6.1.4 Activity categories

Most *infoDev* activities fall under one of the following four categories: 1) Consensus Building, 2) Information Infrastructure Strategies, 3) Telecommunications Reform, and 4) Demonstration Projects, each of which will be expanded on in turn.

6.1.4.1 Consensus building

Consensus Building may include national, regional or sectorial workshops focused on a wide range of topics including telecommunications reform, information infrastructure or information systems for education and health. International workshops on targeted information issues like international telecommunications accounting rates and the protection of intellectual property rights may also be held. In addition, infoDev sectorial networks, in association with similar networks, could provide communication facilities to virtual communities and improve exchange of specialized information. (World Bank, n.d.c)

Workshops designed to build consensus on policy directions can be an excellent vehicle to allow indigenous interests to make their views known and participate in determining policy and policy process. Of course, these results will only be achieved if workshops are designed in such a way as to make them user-friendly for indigenous peoples and if a concerted effort is undertaken to encourage their participation.

6.1.4.2 Information infrastructure strategies

Information Infrastructure Strategies may include national information infrastructure assessments, sectoral competitiveness strategies, feasibility studies for information infrastructure projects, assistance with legal, institutional and regulatory reform and the dissemination of best practices for sector reform. Specific activities could include defining a portfolio of

strategic information systems or defining policy or institutional reforms such as intellectual property rights legislation to support sector competitiveness. Knowledge assessments, in which a team studies the efficiency with which a society acquires, diffuses and utilizes technological knowledge could also help a nation define a broad strategy to better utilize information resources and processes. Other activities could include creating documentary or software packages on model agreements, legislation and regulatory instruments. (*ibid.*)

Careful analysis of available technologies, their potential use, and potential impact is exactly the type of initiative needed to promote the best use of information technology in each country and region that is considering adopting it and is line with development as a positive movement of the society. This type of analysis is consistent with an institutional focus in that it includes an evaluation of the existing environment and relevant policy institutions. The only thing missing is an explicit statement that the criteria for evaluating information technology applications are those of the people of the country.

6.1.4.3 Telecommunications reform

The assessment, design and/or implementation of Telecommunications Reform includes activities ranging from single issue studies to comprehensive sector reform plans to multi-year reform implementation programs. Specific activities could include assessing an existing policy, designing a plan for opening telecommunication markets to competition and promoting the role of the private sector in investment. (*ibid.*)

Again, this category of project demonstrates an institutional outlook and a desire to move the society in a positive direction. However, a participant-oriented clause is also necessary.

6.1.4.4 *Demonstration projects*

Through Demonstration Projects, infoDev tests the applicability of information technology and telecommunications to the solution of vexing problems of development including poverty, illiteracy, environmental degradation, urban decay, illness and malnutrition. Activities could include developing an educational and entrepreneurial facility for training, or designing distance education programs. Other activities could include creating a prototype software system to demonstrate the feasibility and features of an integrated public financial management system or sponsoring self-sustaining community centers that provide information services to underserved urban and rural communities. (*ibid.*)

If these projects are developed in line with the definition of development used in this thesis there is real potential for innovative uses of computer mediated communication to aid in development.

6.1.5 *Objectivity*

The Bank's Information for Development program also purports to be an objective purveyor of information and assistance, in keeping with the rest of Bank policy:

infoDev is an important link to the vast network of technical, informational and communications expertise available throughout the world. The program helps ensure that developing economies have access to information that is relevant, just in time, and above all *objective* and free from conflict of interest. Through its partnership with governments, multilateral and bilateral donors, the private sector and not-for-profit organizations. (World Bank, n.d.b, emphasis added)

The Bank says it again...

The role [of the World Bank in a program like *infoDev*] is one of an honest broker working in an *objective* manner with the emerging economies as they define their needs, and subsequently, reaching out to match these needs with the resources that are required to satisfy them. (*ibid.*, emphasis added)

...and again...“...*infoDev* mobilizes world-class, unbiased expertise in support of government initiatives in the information sector” (World Bank, n.d.c). As far as those who write the *infoDev* materials are concerned, *infoDev* is somehow a completely unbiased entity.

Samarajiva and Shields (1990b) would disagree, as this discussion of the inherently value-laden decisions involved in investing in telecommunications illustrates:

Telecommunication resource allocation decisions may be seen in terms of supply decisions between investing in telecommunication as against other things; demand decisions where choices are made between classes of users;

and another level of choice involving cost-price relationships. These decisions, be they taken by government or by private firms, involve choices that affect others in society, and hence are value-laden. The academic and policy discourse on telecommunication is not value-free, despite pretensions to the contrary... (p. 229)

infoDev involves more than telecommunications, but the opinions of Samarajiva and Shields seem to be valid for most, if not all aspects of computer mediated communication. Certainly their statement "...that value choices are intrinsic to Third World telecommunication policy, and that it is better for these choices to be made in the open, and not surreptitiously smuggled in behind social scientific rhetoric" (*ibid.*) is generalizable to the larger field of computer mediated communication.

6.1.6 Projects

To date, four *infoDev* projects have been selected to receive funding. One is a feasibility study for the creation of a virtual university for Africa. Another is complimentary funding to support an existing program designed to improve the quality of education in Jamaica's schools through the introduction of computers. A third is funding for a colloquium for regulators from developed and developing countries to deal with the growing convergence of telecommunications and broadcasting industries. The final project is one which seeks to improve access to and utilization of information technology in South Africa, with an initial focus on distance education. This project, *Telematics for African Development*, will be analyzed in the following pages. (World Bank, 1996a)

6.1.6.1.1 *Telematics for African Development*

The South African Consortium on Telematics for African Development was established with the vision of using Information Technology to improve Africa's access to and utilization of information for community development and education....The challenge is to ensure that this technology is used to maximum benefit, utilizing existing knowledge, skills and standards while catering for technological advancements. We need to ensure that any investment that takes place is both sustainable and replicable to guarantee the most effective use of funds. (World Bank, 1996c)

Phase one of the project is intended ...to create a demand-pull and supply-push to the development of the information highway in Africa. The projects proposed concentrate on the Content Creation, Usage and Networking aspects, with the longer-term goal of stimulating the role of the private sector in the publishing and brokerage arenas. (*ibid.*)

This first phase of the project has been broken down into six separate projects: 1) Curriculum Management Tool, 2) Integrated Delivery Environment, 3) Community Information Delivery System, 4) Mamelodi Community Information Services, 5) Technology Education Curriculum for South African Schools, and 6) The Academic Reading Construction Kit (World Bank F, 1996).

6.1.6.1.2 *Mamelodi Community Based Information Services*

The Mamelodi Community Information Services component seems to be very much in line with a participant-oriented (if not participatory) project geared to bringing the most useful aspects of computer mediated communication within reach of the common people in a developing region. Project materials describe the project as one which is geared “...to demonstrate the applicability of information technology in the provision of information services to underserved communities. The project is aimed at non-formal education, economic development and the empowerment of citizens through access to information...” (*ibid.*). Project materials emphasize the project as “...a catalyst for the empowerment of individuals and communities” (*ibid.*) by:

- Creating information about products, services, resources, issues and events in the community, thus promoting participation in community affairs;
- Creating a mechanism for information exchange between the government at all levels and citizens, thus promoting participative transparent governments; and
- Allowing people to interact in a meaningful way with other people in the world through the Internet;
- Promoting trade and entrepreneurship through the support of Small, Micro and Medium Enterprises and the creation of new information based business. (*ibid.*)

Such a project has tremendous potential to capitalize on the power of computer mediated communication to facilitate access to information, a sense of global community, a forum for expressing oneself, and more opportunities for economic growth. However, there is also always the potential for the darker side of the equation—loss of privacy, a one-way flow of information, cultural deterioration, and economic exploitation—to be

predominant if the technology initiatives implemented are not designed to avoid these effects. Only once the project has been implemented will it be possible to tell which potential was realized.

6.1.6.1.2.1 Initial report on the project

A paper delivered by one of the project leaders, Lebo Negoabe, elaborated on the structure and procedures of the project. This paper reveals a project with a strong participatory agenda. For example, a workshop was organized to bring together

...service organizations, non Government Organizations, Community Based Organizations, student bodies, educational bodies, youth bodies, business, political organizations, churches, and ordinary members [of the community]...to look at means and ways of making information accessible and available to the community... (1996, p. 3).

During the workshop participants assessed the institutional structure of their community in terms of access to information and the types of information available and then proceeded to discuss how they could “ensure that [Mamelodi] is empowered for development” (*ibid.*).

Negoabe discusses the possibility of other communities replicating the Mamelodi project, but stresses that in order “...for the project to be successful, the people in those areas [i.e. the other communities] should be involved in the planning and execution of the project” (*ibid.*, p. 9).

From these reports, the project appears to be proceeding from a participant-oriented perspective with attention paid to institutional factors. If this is indeed the case,

following the progress of the project would provide useful information on the ways in which participatory and institutional development can be achieved.

7. Privatization & Competition

Evaluating all aspects of the World Bank's use of computer mediated communication in a development context is an impossibly large and complex task that is well beyond the scope of this study. Therefore this chapter focus in on two key Bank policy areas related to CMC and development: privatization and competition. Because "the World Bank wields enormous influence in the restructuring of telecommunications in developing countries" (Urey, 1995, p. 114) it is important to understand its policy on privatization.

An attempt will be made to explore the core of each issue, analyzing the Bank's approach to it and checking for congruence with a neoclassical model, application of institutional principles, application of the principles of participatory development, how an institutional perspective would differ from the current World Bank perspective, and what a more institutional and participatory perspective could contribute to this area.

7.1 Privatization

Despite criticism, published both in independent journals as well as in World Bank sponsored publications, that "privatization has been and is likely to remain a controversial policy issue whose merits policymakers cannot easily evaluate" (Aharoni, 1991, p. 73) the World Bank is aggressively pursuing a policy of privatizing the information infrastructures of developing nations. Privatization is the sale of publicly owned entities to private sector

interests. Once transferred, these entities operate as private enterprises although they are still subject to government regulation if it exists.

Contrary to the thinking of many scholars, the World Bank has adopted the attitude that telecommunications and related entities should not be run by governments: “It is now widely accepted that telecommunications operating entities perform best when they are run as commercial, for-profit businesses. (World Bank, 1994) This position seems to have evolved from a desire to secure adequate financing for information technology infrastructures in LDCs.

Trebing (1995) notes that

by the mid-1980s, the Bank had apparently concluded that governments were unable to allocate sufficient funds to promote the telecommunications improvements needed if their nations were to participate in global markets. As a result, the Bank shifted its emphasis to support privatization of state enterprises. (p. 314)

A paper by the Chief of the World Bank’s Electronic Media Center notes that While it does not take huge amounts of capital to get started, the volume of investment necessary to realize the benefits of the telematics revolution throughout a country can in most cases come only from the private sector. Thus privatization and liberalization are the watchwords...for developing what the World Bank is calling an “information friendly environment”. (Knight, 1995)

This shows that the Bank is quite emphatic that privatization is the best route for most, if not all countries to follow.

The transferring of investment and operation responsibility for the telecommunications infrastructure from the public to the private sector is an urgent and particularly complex task. It involves sacrificing local short-term revenues and control to gain the investment volume and service improvements that a competitive private sector can supply. (Talero & Gaudette, 1996)

Urey (1995) says that the World Bank is "...bent on abolishing state enterprises and promoting markets" (p. 122). Observation shows it is also bent on abolishing universal service obligations.

Schiller and Fregoso (1991) cite the World Bank, in the company of the International Monetary Fund, the US Agency for International Development and the US Department of Commerce, as vigorous advocates of telecommunications privatization, writing that, "during the 1980s these influential agencies elevated the doctrine [of privatization] into a reigning orthodoxy, a cure-all whose application would purportedly benefit a vast range of activities..." (p. 203).

Schiller and Fregoso argue that privatization was induced by fears of corporate capital flight, the fact that aid money was increasingly tied to privatization requirements, and the threat of being bypassed by private interests using new telecommunications technologies (*ibid.*, p 206). The end result, Schiller and Fregoso write, was that "...both privatization and bypass occurred. Furthermore, privatization itself was only an especially

thoroughgoing and radical means of bypassing public telephone networks—a means that left the surviving organization(s) less encumbered with public service obligations” (*ibid.*, p. 207).

7.1.1 U.S. influence on policy

Like any other organization, the World Bank exists amidst a social, political, and economic institutional structure which it influences and which it is influenced by. This thesis does not seek to explore the complete institutional context within which the Bank operates but instead concentrates on the Bank’s efforts to use computer mediated communication for development in the developing world. However, some of the Bank’s policies regarding CMC seem to be heavily influenced by U.S. political factors and thus this factor needs to be mentioned, as it relates directly to the Bank’s capacity to address institutional and participatory development issues (i.e. policy suited to the U.S. institutional situation is not necessarily suited to LDC institutional structures, and having policy predetermined by the U.S. precludes the participation of LDC peoples in policy formulation).

Hoffman and Hobday (1989) write that “the telecommunications development concerns of Third World countries sometimes conflict and sometimes mesh with the current American telecommunications policies” because

...issues of industrial development have conditioned developing country policies toward equipment supply and technology development in telecommunications. The regulatory focus of developed countries over the

supply of telecommunications services contrasts directly with the efforts of developing countries to establish basic infrastructures. (p. 234)

Hashim (1992) writes, “The immediate impetus to privatize may differ from country to country but Hills (1986) and Schiller (1983) regard privatization as part of the United States’ effort to establish its technological and economic leadership in world trade and services” (p. 101). Urey (1995) thinks that the Bank’s support of telecommunication lending tied to widespread structural reform and promotion of political alliances with powerful liberalizing countries “...link developing-country telecommunication development explicitly to the needs of exogenous private interests—telecommunications companies and financial institutions—in industrialized countries” (p. 124). Hashim (1992) conducted a review of relevant literature and concluded

...that Asian countries were persuaded to privatize at the suggestion of then US Treasury Secretary Donald Regan through the Asian Development Bank (ADB)... In addition, the World Bank, the International Monetary Fund (IMF) and the United States Agency for International Development (US AID) also promoted private enterprises especially in telecommunications development. (*ibid.*)

In developing its privatization policy it appears that the Bank did not undertake a measured analysis of all the policy options available but that it bowed to pressure from U.S. interests and adopted the U.S. position: “during the 1980’s, the United States put enormous pressure on the Bank to promote privatization...thus part of the Bank’s rhetoric can be heard as supplication to its Washington neighbors” (Urey, 1995, pp. 131-132).

The World Bank uses the United States as their model for telecommunications regulation (Urey, 1995, p. 125).

The international lending agencies have become an additional factor in the pressures to liberalize the telecommunications systems of less developed nations. The lending agencies have become advocates of privatization in many sectors of developing nations economies, including telecommunications. *In many respects the operating philosophy of the international lending institutions simply reflects the conventional economic wisdom of the industrialized nations.* (Horwitz, 1992, p. 295, emphasis added)

This conventional wisdom is not considered so conventional in many developing nations. Berg (1987) lists a number of groups that are usually against privatization—especially in the form of divestiture—in LDCs. They include intellectuals in the developing world, the military, labor, and bureaucrats. He concludes, “...one must look hard and long to find a constituency for a divestiture program....so far the major force for privatization have been outsiders—the World Bank and the IMF” (p. 27).

Two World Bank staffers, Nellis and Kikeri (1989), see the problem a little differently:

...public enterprises were started with the expectation they would contribute to government revenues; in all too many cases their costly subsidization is now justified on noneconomic grounds. This pervasive state of affairs with regard to financing problems, and not any dramatic

change of ideological viewpoint, is the principal factor leading developing country officials to consider alternatives [such as privatization,]to past [public enterprise] practices. (p. 662)

Nellis and Kikeri see the driving force behind privatization as LDC governments that are seeking to improve their financial situation. As this is the only assertion of this type in any of the literature reviewed it is somewhat suspect. Later in their article, however, they do acknowledge that many officials in developing countries are opposed to privatization, citing these officials support for public control and intervention in the economy (p. 664).

Following the United States lead in privatizing leaves developing countries more vulnerable since "...privatization of telecommunications in developing countries, often leveraged by the World Bank, deepens the intersection between developing country telecommunications and global capitalism" (Urey, 1995, p. 114). This "...privatization of telecommunications infrastructure represents an aspect of global financial integration because privatization often involves international joint ventures and foreign direct investment" (Urey, 1995, p. 113).

These assertions certainly call into question the neutrality/objectivity of the World Bank.

7.1.2 Congruence with neoclassical model

The Bank's pro-privatization stance is in line with a neoclassical model of development. Nellis and Kikeri (1989) say that "despite the lack of a direct causal link in neoclassical theory between private ownership and efficiency, there exists nonetheless a plausible argument that associates private ownership with increased productivity and

efficiency” (p. 663). Citing origins in the public choice and property rights schools of economics, Nellis and Kikeri summarize the reasons why they believe private owners would avoid the constraints that befall public enterprises:

- I) Under private ownership, there would be less political interference in the decision making of the firm.
- ii) Managers (and perhaps workers as well) in private firms would (or at least could) receive higher salaries, more clearly linked to productivity and profitability norms.
- iii) Privatization would impose on firms the discipline of commercial financial markets (as opposed to the “soft budget constraint” so often enjoyed by [public enterprises]).
- iv) Privatization would replace supervision by disinterested government bureaucrats by that of self-interested shareholders; they would impose commercial profitability as the main objective of the firm, and judge managers on their success or failure to achieve this goal. (p. 663, Nellis and Kikeri attribute these themes to Hemming and Mansoor, 1988).

Nellis and Kikeri’s solution to the constraints of public enterprises is privatization. There are other solutions to these issues, including regulation designed to separate political interests from decision making, implementation of greater accountability for public sector managers, and perhaps even tying the salaries of public sector managers to productivity levels. However, privatization is the solution the Bank has decided to pursue.

Najmabadi, Banerji, and Lall (1992, cited in Urey, 1995, p. 123) note that “the Bank’s approach to industrial policy may be described as ‘moderate neoclassical’ which accepts that factor and product markets are not fully efficient in developing countries and that there is a role for government interventions...”. In the Bank’s telecommunications activities, it

...seeks to get the prices right: If telecommunications were turned over from state enterprises and protected monopolies...supply would be free to meet the enormous pent-up demand existing in most developing countries, economies of scale would be achieved to control costs, and everyone would be better off. (Urey, 1995, p. 123)

An alternative view, espoused by the international Telecommunications Union’s development activities seeks to redress the communications ‘gap’ between rich countries and poor, believing that

Enlightened, informed policymakers should be able to stimulate investment within the context of the existing institutional and industrial structure. If donors and development banks would support telecommunications projects as richly as they have other infrastructural projects and if the revenues from telephone services could be used to guarantee commercial loans, then developing countries could achieve more appropriate levels of investment. (Urey, 1995, p. 123)

Urey notes that the World Bank has attempted to mediate between these two views to an extent, writing that “...the Bank has been an instrumental force of convergence toward a

‘unified’ theory of using ‘the right prices’ to bridge the gap” (*ibid.*). But he sees a tremendous dichotomy in World Bank attitude towards telecommunications:

At one end is its advocacy of free markets and privatization and at the other end is liberalization with surgically targeted development assistance. The perpetuation of the broad public-sector ownership of telecommunications infrastructure and resources is out of the question, given the interest of the Bank’s telecommunications experts in ‘demolishing’ monopolies... (p. 114)

7.1.3 Appropriate adoption of institutional concepts

Bank policy on privatization does contain some elements of institutionalism in that it recognizes that each situation is unique:

Bank economists...concede that structural changes [in telecommunications infrastructure] must be tailored to circumstances in each country and that some countries face more challenging circumstances than others, including high levels of political risk or the needs of urban and rural poor that may ‘result in government having to assume a residual financing role’...(Urey, 1995, p. 120).

Smith and Staple (1994) reiterate the need for country specific regulations:

Regulation must be broadly understood to include a country’s political and judicial competence as well as its commercial customs. Whether or not an effective regulatory regime can be designed for telecommunications will depend on how well the new regime fits with existing governmental

institutions. Regulatory designs cannot easily be transplanted unchanged from one country to another. (p. xv)

It appears that at least during the period when the Bank's privatization thrust was in its infancy, the Bank looked at privatization as only one of many possible options when dealing with a public enterprise in need of assistance. Nellis & Kikeri (1989) write:

...where it can be shown or reasonably expected, on the basis of enterprise-level diagnosis, that privatization will contribute to efficiency promotion and deficit reduction, and do more than other available actions, then the Bank has supported and will continue to support privatization. (p. 665)

Later on in Nellis & Kikeri's article they also state that "...reform programs must be tailored to individual country circumstances" (*ibid.*, p. 669).

Another, more recent example of a somewhat more institutional focus appears in a World Bank sponsored study of twelve cases of privatization (three telecommunications firms, four airlines, two electricity companies, a lottery, a transport company, and a container terminal) in four countries concluded that "Privatization can bring substantial gains...these gains are only attainable, however, if privatization is properly done." The report then went on to caution that these findings are not applicable everywhere (Galal & Shirley, 1994, p. 4).

7.1.4 Application of the principles of participatory development

It is difficult to find evidence of a participatory focus in the World Bank's privatization thrust. As has been mentioned, much of the impetus for the Bank's stance on privatization appears to be linked to U.S. influences.

Trebing and Estabrooks (1995) note a tension between participation and the privatization for profit idea:

...there remains the question of what criteria should be used to evaluate the global infrastructure. A global network is a form of commons, and the general goal should be greater participation in this facility by everyone.

But the pressure for profitable operation associated with privatization and interfirm rivalry will give little or no recognition to such values. (p. 536)

Another factor that might cause problems with participation is Urey's (1995, p. 125) observation that there is a certain amount of intellectual imperialism in the attitudes of Bank staff. Certainly, if such an attitude is widely held it would inhibit, if not preclude, genuine participation from occurring in Bank sponsored projects

As was mentioned in the analysis of participation in the *infoDev* program, Bank efforts towards participatory development seem to focus more on national institutions than on reaching the grassroots populous. No mention was found in the literature of any World Bank public hearings on privatization, or solicitations of input from indigenous peoples.

7.1.5 Difference between institutional and World Bank perspectives

An institutional perspective would pay more attention to the institutional structures of each situation. Nulty (1989, quoted in Urey, 1995) writes:

Bank economists advise developing countries that social and political considerations no longer have a place in the formulation of telecommunications policy and add that liberalization is an inevitable, nonideologically driven force.

This is completely contradictory to an institutionalist methodology which emphasizes the extreme importance of sociological and political considerations.

Theorists, Vickers and Yarrow (1991) state that “it would be simplistic to view privatization as a universally effective remedy for [government] agency problems in the public sector”, citing the ease with which governments can continue to intervene in imperfect markets, the lack of credibility of government promises not to intervene, which can result in inefficient underinvestment, and the “potentially large distributional and political consequences...As with other areas of public policy, privatization cannot be expected to be exempt from the impact of government failure” (p. 130). They go on to caution that “the effects of privatization in any particular context will...be highly dependent upon the wider market, regulatory and institutional environments in which it is implemented” (*ibid.*).

Urey (1995) writes that the unique nature of telecommunications results in a need to take political and social concerns into consideration:

Telecommunications is not like any other business and public-sector operators are generally not like other publicly owned enterprises. Despite inefficiency, corruption, and political unrest, state-owned telephone operators are more likely than other large state-owned enterprises to operate in the black. More than many other state-owned enterprises, telephone operators are specific targets for transnational corporations in the same line of business. But greater diffusion of access to telephones is an

inherently political issue concerning access to information and possibilities for social interaction. (p. 129)

Horwitz (1992), a communications professor studying South Africa, draws attention to the need to analyze each situation on its own by writing that “in Third World countries with histories of irredeemably corrupt state bureaucracies, privatization may be called for. But South Africa does not suffer from garden-variety corruption; it suffers from institutional, systematic, racially based corruption” (p. 306) and therefore needs to set the extension of basic service to the African population ahead of all other priorities, including privatization.

The World Bank might do well to take Vickers and Yarrow’s (1991) summation of the challenge of economic analysis of privatization as being the need “to develop a more complete understanding of the implications for business conduct and performance of these complex interactions among ownership, market structure, regulatory, and political variables” (p. 130) and use it to guide an in-depth Bank study of this inadequately explored issue.

An institutional perspective would take the time to take a close look at the various possible ramifications of privatization, such as De Fraja’s (1991) remark that “privatization, although improving productive efficiency, reduces allocative efficiency, and may reduce welfare” (p. 317). “Far from privatization improving efficiency and reducing waste, it may yield the opposite results of a reduction in industry efficiency” (p. 319). Hoffman and Hobday (1989) note that

Despite...[some successes in telecommunications privatization in some countries]...it is dangerous to generalize too quickly from a few examples. Because these [ownership and regulation] changes occur under some circumstances in some countries, the same principles do not necessarily apply in all countries at all times: regulatory and structural reform in the direction of liberalization, privatization, and market forces is not automatically a 'good thing' in developing countries simply because similar developments have been successful elsewhere. (p. 247)

7.1.6 Contribution of a more institutional and participatory perspective

Adoption of a more institutional and participatory perspective would contribute regulation that meets the needs of its constituents, and better information on institutional structures for developing country policy makers. Halloran (1986) writes,

Technology should not be allowed to determine needs. Information and communication needs should be identified and evaluated from a specific value position, and then technological developments, communication policy, political and economic decisions should be formulated to meet those needs. One of the main tasks of research is to identify such needs and then to provide the information which is the prerequisite of intelligent policy formulation. (p. 56)

A more institutionalist attitude from the World Bank would see it supporting the development and provision of such information for developing countries. If the Bank had been operating within a participatory paradigm it would likely have been made aware of its

constituents needs for this type of information, and would have been able to implement measures to facilitate its collection.

Because the issue is so politically charged, anything but an institutionalist perspective does not adequately take institutional factors into consideration. Urey (1995) advises that since

Little is known about the consequences of privatization on service provision to the majority of communities in poor countries....Given how little is known about the distributional effects of privatization and the extent to which privatization is not an easily reversed process, the Bank and others should commit more of their research resources to evaluating the consequences of induced structural change for the majority of users and would be users. To continue to push countries toward privatization without addressing these issues is reckless. (p. 132).

Bauer (1995) notes that “any decision to invest in the telecommunications infrastructure needs to consider factors that go beyond the industry” (p. 279). The needs and desires of LDC peoples will play an immense role in determining the success of any telecommunications infrastructure investment.

The author of a study of privatization and liberalization efforts in a variety of developing countries wrote:

It is intriguing why countries with similar economic profiles, attempting transformations in their telecom sectors at about the same historical moment, reach widely different outcomes. This study argues that an

understanding of these outcomes requires an analysis of the political and economic dynamics that surrounded events in each country and the opportunities and obstacles posed by domestic political institutions.

(Petrazzini, 1995, p. 192)

That study found “that achievement of privatization is strongly linked to the nature of local political institutions, the dynamics between the state and civil society, and the distribution of political power within the state itself” (*ibid.*, p. 193). Interestingly, the study found greater success rates for privatization in countries with a more autocratic government system than in those which were more democratic. Perhaps this is because the autocratic societies were more in tune with the institutional structure of their societies, and were able to accurately evaluate the best methods to bring about change within this structure. More studies which generate findings like these, which are useful to LDC governments considering privatization, are needed.

In sum, current knowledge about privatization leaves many questions unanswered. Trebing and Estabrooks (1995) note the World Bank’s efforts towards encouraging the privatization of postal, telephone, and telegraph systems and the introduction of regulation that is designed to encourage competition and conclude:

The assumption is that this will stimulate trade and growth in the Third World. However it is far from clear that privatization will result in the type of infrastructure that will achieve balanced growth. The prospect of privatization has created an immense incentive on the part of communications carriers and suppliers in industrialized nations to invade

the Third World to acquire and upgrade telephone properties. Whether privatized networks will provide comprehensive domestic service or cater primarily to the needs of multinational corporate buys remains to be seen. (p. 536)

7.2 Competition

Ramamurti (1991), an economist, believes that “in the long run, privatization is...likely to strengthen the institutions necessary to make markets work...” (p. 16), which indicates that the Bank’s policy on privatization appears to merge well with its efforts to support competitive markets. In many ways, the Bank’s efforts towards fostering competitive markets is more intense than its support for privatization. Nellis & Kikeri (1989) say that “there is a general consensus that the enhancement of competitive forces is equally if not more important than ownership” (p. 670).

The World Bank recognizes that

In most developing countries, growth [in telecommunications infrastructure] is a more urgent objective than efficiency. Where the incumbent’s networks meet only a small fraction of total demand, new entry is likely to have a greater impact on meeting demand than improving the incumbent. (World Bank G, 1994)

Therefore, it would seem reasonable to assume that World Bank policies would focus on meeting demand, which is where the World Bank policy of encouraging competitive markets enters the picture.

In 1991 Sussman accused the World Bank of imposing loan preconditions “...that require Third World countries to establish or maintain monopoly local telephone service providers and centralized regulatory bodies” (p. 42). This is in stark contrast to this researcher’s findings that the World Bank, in line with much of current thought, is in favour of a competitive marketplace (with appropriate regulation) for the information infrastructure. A World Bank report on communication technology in Africa states:

The key here is competition. Without competition, it is highly unlikely that the continuing rapid fall in the cost of processing, storing and communicating information will be translated into falls in prices, which are what matter to producers and consumers. (Knight, 1995)

In order to bring this type of market into existence the Bank recognizes the need to establish an environment conducive to competition:

Appropriate legal and regulatory environments need to be set in place as information infrastructure development requires moving away from traditional monopolies to an environment in which information services are provided on a competitive basis (World Bank C)

The Government of Canada’s Bureau of Competition Policy (1995) believes that regulation, due to its static nature, may “...impede the economic process by which superior technologies displace inferior ones” (p. iv). However, even the Bureau is in favour of some regulation, such as that which would limit the formation of monopolies. Their position is similar to that expressed by Turner (1996): “Because digital communication is

different—fast, cheap, interactive, and controlled by decentralized users—it calls for *less* regulation than traditional media, not more” (p.108). Certainly, too much or inappropriate regulation will stifle businesses incentives to invest in information technology. However, appropriate regulation will not dissuade investors and will provide a measure of protection for those in developing nations who would otherwise be exploited by this technology.

7.2.1 U.S. influence on policy

Critical of the Bank’s desire for competitive markets in telecommunications, Horwitz (1992) calls attention to the U.S. influence on competition policy: “The forces that have pushed for the end of monopoly control of telecommunications surfaced first in the USA” (Horwitz, 1992, p. 292).

A report by the National Telecommunications and Information Administration (cited in Leeson, 1984) in the U.S. points out the incongruity between a (primarily) U.S. policy of competition and the wishes of many developing country governments to retain some form of monopoly control over telecommunications entities.

7.2.2 Congruence with neoclassical model

The Bank’s policy on competition is in line with the neoclassical ideal of perfectly competitive markets. Gillis, Perkins, Roemer, and Snodgrass’ neoclassical text on development (1992) lists competition as a necessary condition for a developing country to make “...the transition from a regulated economy to a well-functioning market economy...” (p. 114).

Trebing (1989) has a poor opinion of competitive markets in telecommunications. Although speaking in the context of the U.S. situation, his remarks have some relevance to the developing countries situations as well. Trebing writes:

The case for competition appears far too optimistic when examined in greater detail. There is strong evidence that entry is of limited effectiveness, and that the persistence of market dominance by the FBCs together with fundamental demand and production economies, market segmentation, and interdependence between firms, constitute major obstacles to pervasive competition. (p. 102)

7.2.3 Appropriate adoption of institutional concepts

While the Bank supports a system of competitive markets, it also encourages regulation to govern those markets:

Bank working papers expressed great faith in the creation of competitive markets as a stimulus for efficiency and a source for new capital. However, it is interesting to note that the World Bank also took a strong stand in favor of putting both competitive markets and regulations in place. This juxtaposition of competition and regulation stands in sharp contrast to much of the deregulation literature in the United States. The World Bank argued that there is a need for regulation... (Trebing, 1995, pp. 314-315).

Trebing goes on to lament that the Bank did not go further and set out specific regulatory proposals and an analysis of each, but instead allowed wide experimentation with little consideration of potential and real consequences.

Baum and Tolbert emphasize the need for more than just market forces in their 1985 World Bank publication:

The best economic performance [in terms of developing nations] has come neither in countries with comprehensive central planning...nor in countries where both the planning effort and economic management were weak...Instead it has come in countries...that chose to concentrate their efforts on devising a network of price and other incentives to guide both public and private activity and on designing an appropriate public investment program. (p. 22)

Further, they state that “...there will always be legitimate economic and noneconomic objectives that governments can pursue only by intervention...All countries must and do rely on a combination of government intervention and market forces” (Baum & Tolbert, 1985, p. 23).

Trebing (1989) equates deregulation with the neoclassical model: “...the movement toward deregulation has received a stamp of credibility from neoclassical economists who have adopted a highly critical view of any form of price-earnings control” (p. 94). By this definition, the World Bank’s support of regulation is not in line with neoclassical thought and instead is in agreement with an institutional perspective, as it has tailored its policies to reflect the needs of the political situations of developing nations (i.e. they are in need of regulation to enforce competition). In fact, its recognition that

If the only objective [of public entities] were economic efficiency, the rule for pricing would be clear: to duplicate to the extent possible the results of

a free competitive market, by setting prices equal to marginal cost.

But...other objectives—such as concern for distributive justice—may call

for departures from this rule... (Baum & Tolbert, 1985, pp. 32-33).

is more in line with institutional than neoclassical economics, although neoclassical economics does agree with some regulation to support public policy functions when required.

7.2.4 Application of the principles of participatory development

As with privatization, there is little evidence of participation by indigenous peoples, except for private business interests and governments, in the quest for competitive markets in developing country telecommunications. The Bank seems to be trying to take into consideration the needs of the less well off, by pursuing competition in concert with protective regulation. However, without involving the people in determining what their needs are these efforts will not be as effective as possible.

7.2.5 Difference between institutional and World Bank perspectives

An institutional perspective would not necessarily favour competition in all situations, but neither would it be opposed to it in all situations. It would consider that what works in the developed world will not necessarily work in the developing world and that even within the developing world, what works in one country or region will not necessarily work in another country or region. Horwitz (1992) notes that the difference between the first and third world when it comes to telecommunications is that

In the First World, the telecommunications infrastructure is already in place.....Free market, public choice economists and the policy makers who trumpet ‘the entrepreneur is king—government is evil’ conveniently, perhaps duplicitously, forget history when they denounce regulated monopolies. The point is that policies that may work for mature capitalist democracies may not be appropriate for capital-starved, technology-deprived developing nations. (pp. 305-305)

7.2.6 Contribution of a more institutional and participatory perspective

Adoption of a more institutional and participatory perspective would contribute a more careful analysis of the existing institutional structures, part of which would be insisting that the institutions of developing country peoples be adequately accounted for.

It is gradually becoming apparent that competition is not a substitute for public policy and regulation. It is a potential tool of policy that, under some circumstances, can facilitate the achievement of the objectives of economic efficiency and universal public service; under other circumstances it can promote efficiency at the expense of social policy; under still other circumstances it can promote neither. It is the task of policy research and analysis to examine the circumstances and determine the most appropriate role for competition. (Melody, 1991, p. 38)

Sussman (1991) espouses an institutionalist perspective, when he writes that “telecommunications policy cannot be understood in isolation from the broader political economic demands and directions of which generally it is in consonance” (p. 63).

8. Conclusions

Information Highway. Internet. World Wide Web. These concepts that generated blank stares just a few years ago are now prominently displayed across every media outlet, spill out of the mouths of everyone from children to grandparents, and are becoming vital tools of how we work, play, and participate in society. The onslaught has been rapid, with little time for careful planning and consideration of the significance and impact upon society.

In this age of the “information economy”, an important issue is how the information technology applications which are now becoming so prominent have the potential to stratify society more deeply into those who have access to information and those who do not. “A major challenge for public policy will be to find methods to ensure that developments in the information and communications sector do not exacerbate class divisions in society and that its benefits are spread across all classes” (Melody, 1987, p. 1336). Dunn (1996) writes that computer mediated communication must be deployed with the world’s information poor in mind:

We know that even as we celebrate the 100th anniversary of the emergence of the telephone as a tool in human communication, more than half of the world’s population does not know what it is like to use a telephone. Even as intellectuals and corporate elites are empowered by the marvels of the Internet, the technology of the typewriter has still to reach the great majority of humanity. But wherever any element of these information

processing and communication technologies exists, it should be deployed in a critical and appropriate manner to narrow the gap between the information rich and the information poor. (p.10)

The World Bank has undertaken an extensive effort to bring about change in the existing structure of information systems and to foster new communication systems within developing countries. Recognizing the potential of computer mediated communication and its possible use as a development tool is commendable. However, the World Bank has misunderstood the information economy and needs to rethink its initiatives to take the networked nature of the economy into account. Specifically, it needs to pay more attention to institutional and participatory factors in order for its programs to have a positive impact. This does not mean that it should completely ignore existing market inefficiencies, but that it should deal with transaction inefficiencies.

8.1 Role of CMC in Development Today

Computer mediated communication has tremendous potential as a development tool, if used properly. Development literature has shown a wide range of initiatives; efforts to provide access to basic telecommunications services, national information centres, programs to computerize national bureaucracies, and other initiatives designed to improve access to and control of information.

The opportunities to use computer mediated communication must be approached cautiously however, as its use will change communication patterns and processes. These changes must be taken into consideration as much as possible before implementation is

begun. Drake (1995) draws attention to the need to determine the path of technology, and not let technology determine the path of society:

...there is no innate logic to the new [information] systems and services that will lead automatically to their widespread diffusion and adoption and then transform society...Technology is socially constructed; its character and implications depend on how it is organized, supplied, accessed, and utilized in the context of corporate strategies, market structures, and public policies. (p. 10)

It appears that every development agency is using information technology to some degree. The World Bank has one of the more extensive programs in existence at this time.

8.2 Summary of World Bank Program Strengths and Weaknesses

This survey of literature from and relating to World Bank initiatives to use computer mediated communication for development has illuminated a strong desire to use information technology for development projects and some attempts to do so through a set of implied policies and procedures.

The Bank does not seem to be suffering from misguided notions that only the latest and greatest technological innovations be used. They seem to be working at using the right technology for each situation, keeping in mind that there are advantages to leapfrogging intermediate technologies when appropriate.

infoDev, the Information Technology for Development Program, is the Bank's most ambitious and visible means for implementing computer mediated communication to aid in development. Initial reports show the program to be striving to be participatory and

to be taking institutional factors into consideration. Further observation over time will reveal whether these aspects continue to be integral to the project. If they remain a high priority, the outcome of *infoDev* initiatives will be a testament to the usefulness of these concepts.

Beyond *infoDev*, the Bank is involved in computer mediated communication through its stance that developing countries ought to privatize their telecommunications systems and bring about competitive markets in telecommunications whenever feasible. The Bank really does not have an institutional perspective on these issues, neglecting to insist on a thorough institutional analysis of each situation. In addition, they have not conducted extensive research on these issues in relation to telecommunications in an LDC context. If they were to undertake such a study, they would be providing information essential to developing country decision makers in order to enable them to make an informed decision about the path their countries are to take. However, the Bank's negligence in this area is in keeping with its paternalistic attitude towards developing countries abilities to effectively make decisions about their communications infrastructure. The Bank seems to be content to dictate policy in this area, which, obviously, leaves no room for developing country citizens to participate in the policy process. In fact, in the literature available there is no discernible attempt by the Bank to approach privatization and competition with a participatory perspective.

A positive aspect of the World Bank's efforts towards bringing about competitive markets in telecommunications is their belief in the need for government regulation to provide a framework for the market system. If the regulation is designed with an

institutional and participatory approach it should protect those who would be harmed by completely unfettered markets while providing enough room for businesses to function efficiently. As Trebing and Estabrooks (1995) note, achieving that balance is not an easy task:

The challenge for public policy will be to select that set of programs that shapes the emerging infrastructure to meet societal efficiency, equity, and universal service goals. It is far from clear whether this is best achieved through deregulation and unfettered competition or through some new form of regulatory intervention. (p. 537)

More institutional assessments, sponsored by the Bank, will provide useful information to help in determining which types of markets and regulations should be most conducive to meeting the needs of the constituents in each situation.

The Bank needs to develop the participatory and institutional initiatives it has been involved in thus far, and to proceed further in these areas. This will be crucial to the success of efforts to realize the tremendous potential that exists for CMC to be used for development purposes.

8.3 Contribution of Institutional Analysis to this Study

In an information economy, institutional economics has greater explanatory power than neoclassical economics due to its ability to take into consideration the many non-market factors that figure so prominently in this type of economy. For example, political support for or resistance to computer mediated communication will have profound effects

on information technology diffusion, types of uses, and accessibility; effects that are not easily explained by the forces of supply and demand.

An awareness of institutions, and the challenges facing them, in this type of economy are crucial items to be cognizant of when attempting to implement CMC for development. Robinson (1991) writes:

The complexity of today's issues, and the important transformative implications of the new information and communication technologies (IT), have led to the suggestion that there is a mismatch between the opportunities provided by the new technologies and the existing institutions. Institutions at both the national and international levels are finding it difficult to adjust to the new requirements. (p. 99)

Only by understanding what the institutions of a society are, and how they are structured, can development agencies and LDC governments work to find a better fit between opportunity and institutional capability.

Institutionalism's emphasis on analysing each situation in light of its particular place within an ongoing structure helps avoid such mistakes in using communication technology as Parker (1977, cited in Mehra, 1998, p. 64) warns about:

Perhaps the most serious mistake that can be made in a development support communication plan would be to make a prior assumption about the technology that should be used, based on what is commonly in use in other countries. The development goals of other nations may be different, the institutional structures may be different and inappropriate for the

developing nation, and the capabilities for production of messages to be transmitted through the technology may be different.

8.4 Areas For Further Study

It could be argued that this study has raised many more questions than it has answered. Almost every new application of technology discussed in the World Bank literature could well be explored in great enough depth to warrant an entire thesis of its own. Much is yet to be done in terms of basic comparative evaluations of CMC initiatives in the developing world. Determining what works in which situations and why could provide a wealth of fertile ground for study. And since “technology influences the socio-cultural structure and communication patterns of a given society” (Mehra, 1988, p. 55) efforts to consider a less concrete area, that of what effect computer mediated communication has on the institutional patterns of society, would be worthwhile. As Samarajiva (1988) writes:

The new information-communication technologies are destabilizing. They do not allow Third World decision makers the luxury of the quiet life. Short of extreme isolationist policies which span the politico-economic relations and must usually be accompanied by repressive force, it is impossible to shield Third World countries from the storm winds of technological change. In countries that do not adopt isolationist policies, decision makers are under continuous pressure to react to environmental change, often with inadequate information of the technological choices before them and the problems to be addressed. As is usually the case in

such circumstances, decisions tend to be arbitrary and irrational (Salinas 1985). In some cases the outcome is even worse, with decisions taken on the basis of hard sell marketing by TNCs and venality on the part of local decision makers. (Samarajiva, 1988, p. 182)

An area that has been explored to some degree, but which has certainly not been exhausted, is that of transborder data flows and the locus of knowledge. Schiller and Fregoso (1991) highlight the key issue that arises after the issue of privatization has been discussed and decided on:

Finally [after massive telecommunications privatization had occurred] there was the crucial question of where the 'intelligence' required to service, maintain and manage digital systems, including databases shaping access to information services, would be located. The ability to centralize private control over the configuration and accessibility of network intelligence would be especially problematic for the less-developed country storing 'its network control and maintenance intelligence elsewhere in the network' ...Private control over network intelligence could therefore be expected to magnify opportunities for transnational companies to dictate the terms of trade across the entire range of information products and services that would be provided over their networks. (p. 208)

Melody (1991) has concerns in this area as well:

If less developed countries and regions are to implement telecommunications networks and information services that will serve their

interests in local and regional economic development, the new communication systems must promote local and regional communication and information networks within the context of the particular economic, social, political, and cultural institutions of the region. The new system must increase the incentive to look first inside the region for economic activity, before going outside....These issues require a more detailed examination of all significant dimensions of local and regional economic conditions, and the particular roles that communication and information networks do play and can play in promoting local and regional networks as a priority over international and global networks.

This issue is made all the more difficult by the digital form information is now taking.

Once the issue of what kinds of transborder data flows should exist, and where the locus of knowledge is best located, the next difficulty lies in application of the decisions. Since

...digital 1's and 0's have no respect for national laws, national borders and national controls...these digital bits travel the world at breathtaking speeds, via billions and trillions of different routes on our global communication spine. Shut down one digital route, and digital bits discover another, instantly. (Carroll, 1995, p. A23)

Effective means of regulation or market incentives are currently scarce. Further study using an institutional perspective should provide some useful insights since initial work in this area has concluded that "the success of a regulatory system depends on how well it fits with a country's prevailing institutions" (Levy and Spiller, 1995, p. 418).

8.5 Hope For the Future

The unfolding story of computer mediated communication in the less developed countries is a rich text of potentials and pitfalls. So far, efforts to bridge the gap between the information rich and the information poor have not kept pace with the rapid innovations in information technology. Information systems have been, and are being, configured in a manner which exploits the information resources of the Third World for the benefit of wealthy Third World elites and foreign interests. The World Bank is in an excellent position to assist developing nations to resist these infringements on their rights as citizens of the world and to take control of their own information and the ways in which it is communicated within and between their borders. Drake's (1995) comments about the Internet are relevant to computer mediated communication on a global scale:

Despite its phenomenal growth in recent years...the net remains overwhelmingly the province of educated, reasonably well off, white males. Indeed, as Lewis Branscomb points out, the 'Internet is egalitarian for those who are on it; it is elitist for those who cannot use it or do not have access to it.' But if, over time, the sorts of capabilities found in the Internet could be made available to a substantially wider public at affordable costs, the consequences for our culture, economy, and politics would be enormous. (p. 10)

This is the challenge which the World Bank and others interested in development must face in the age of the information society.

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10. Vita Auctoris

Name: Jennifer A. Wunsch

Place of Birth: Sudbury, Ontario

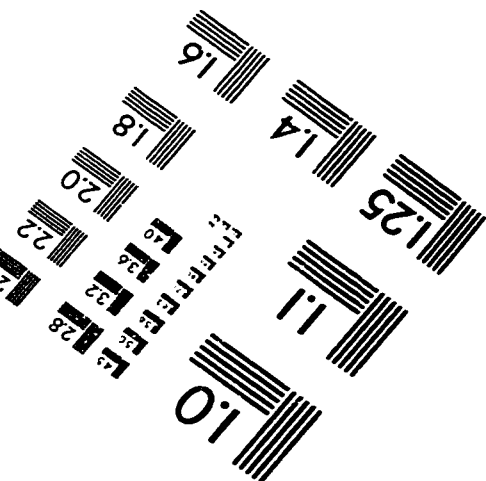
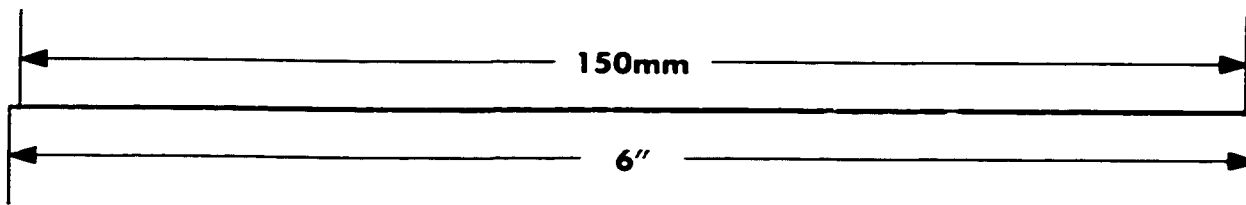
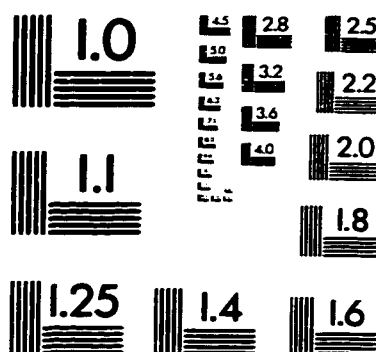
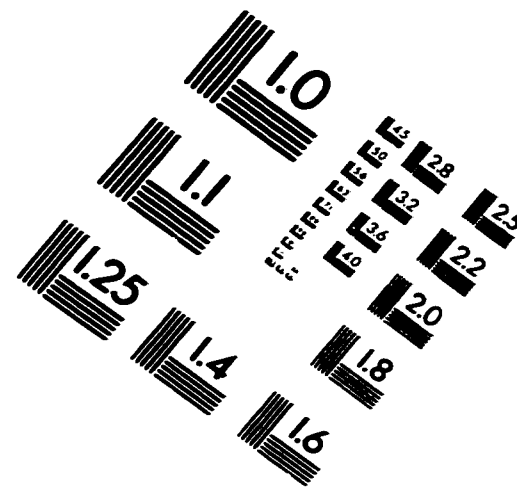
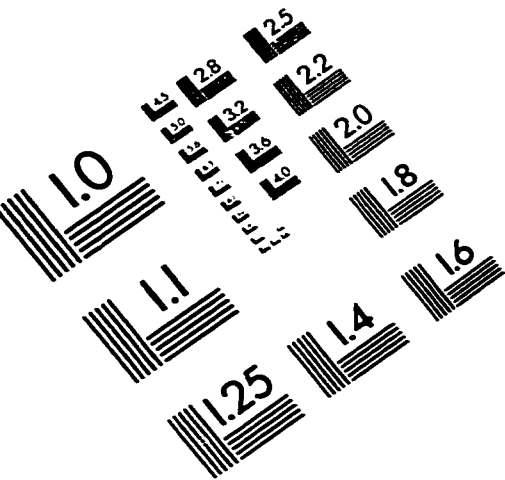
Year of Birth: 1972

Education: Lively District Secondary School, Lively, Ontario
1986-1991

University of Windsor, Windsor, Ontario
1991-1995 Honours B.A.

University of Windsor, Windsor, Ontario
1995-1996 M.A.

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APPLIED IMAGE, Inc
1653 East Main Street
Rochester, NY 14609 USA
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